



Published on the 1st of each Month by

THE INDIA RUBBER PUBLISHING CO.

120-122 LIBERTY ST. NEW YORK, U. S. A.  
LONDON OFFICE, 225 STRAND, W. C.

JNO. R. DUNLAP.

H. C. PEARSON.

Vol. 19.

FEBRUARY 1, 1899.

No. 5.

SUBSCRIPTIONS: \$3.00 per year, \$1.75 for six months, postpaid, for the United States and Canada. Foreign countries, same price. Special Rates for Clubs of five, ten or more subscribers.

ADVERTISING: Rates will be made known on application.

REMITTANCES: Should always be made by bank draft, Post Office Orders or Express Money orders on New York, payable to THE INDIA RUBBER PUBLISHING COMPANY. Remittances for foreign subscriptions should be sent by International Post order, payable as above.

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Entered at New York Post Office as mail matter of the second-class.

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## THE DANGER POINT IN THE NEW TRUST.

THE known policy of the promoters of the New Trust is to frighten the entire rubber trade—in their own language, to "make it seem as if the outside manufacturers were going to be placed in a practically hopeless and defenseless position."

But there is not the slightest occasion for alarm.

For just in proportion as the promoters succeed in organizing, they will strengthen the position of the outside manufacturer, and improve his chances of profit in legitimate business. This has been plainly demonstrated in the experience of the rubber shoe Trust. When that was organized, in 1892, the prospectus stated that arrangements had been made for the control of "twelve of the fifteen manufacturing companies in which is centered the entire rubber boot and shoe business of the country." Subsequently, with two exceptions, all the factories then existing were secured. But even this formidable combination did not frighten Mr. Banigan in the least. Smiling, cheerful, jocose—a very picture of confidence—he teased his big competitor by declining all offers, played tricks with prices, and kept things in such an exasperatingly uncertain condition, that, finally, it was necessary to make him president of the combination, "take care of" his two sons and all his lieutenants at fat salaries, and pay himself and associates \$11,702,800 in shares for a business which was originally started with \$10,000 borrowed money, and as late as 1893 was capitalized for only \$2,000,000. In like manner, Mr. Converse—quiet, dignified, serene and absolutely secure in the strength of his position—was entirely content to remain outside, until very recently the Trust found it necessary to pay him \$13,625,000 for a business capitalized at \$5,000,000—equivalent to over \$12,000,000 at the market price of the securities which formed part of the purchase price.

These are facts enough to indicate what will be the policy of the big and rich concerns in considering the proposals of the Trust promoters.

History will simply repeat itself.

\* \* \*

But what about the numerous and lesser concerns? If the Trust has a purse long enough to satisfy the heavy demands of the big concerns, who are essential to the scheme, how will the combination affect the smaller concerns who are left out? That is the most important question now before the trade, and again we cite history and actual experience as the best means of answering it.

When the shoe Trust was formed, one of the smaller concerns that remained outside was the Colchester Rubber Co., of Colchester, Conn. The cash capital of the company was small, its volume of business was not large, and apparently it was not a formidable competitor of the Trust. But that reasoning left out one very material fact. At the head of the concern was Mr. George Watkinson, one of the most accomplished and successful salesmen that the rubber shoe trade has ever known. In an interview with him, published in THE INDIA RUBBER WORLD for November, 1892, Mr. Watkinson said:

"I have no hesitation in saying that we regard the new company as of the greatest benefit to the trade in general. The marketing of rubber boots and shoes has been my business for thirty years, and in all that time I have never seen a season when the market was so steady in prices and there was  $\approx$  little complaint of price-cutting as this year. All of this is owing to the fact that a great majority of the companies had entered into contracts for the sale of their properties, which took out of the market the competition which has been so unpleasantly felt year after year ever since the dissolution of the old Goodyear association."

Within a few months after these developments, shares of the shoe-Trust to the par value of \$700,000 were issued in payment for the Colchester Rubber Co., and the Manufacturers' Selling Co., also of Colchester, in both of which Mr. Watkinson was interested; and Mr. Watkinson himself was appointed assistant general manager of the big combination at a handsome salary. Mr. Banigan, as president, afterwards did some pretty tall kicking about the terms of the purchase, but with that we are not now concerned. The incident serves to demonstrate the independence of the small factory under skilled management in competition with the big Trust.

\* \* \*

Nor does the story of competition with the Trust end here. Forceful, successful, and ambitious men who sell their factories and engage their services to the Trust, no sooner complete their contracts than they build new factories, equip them with the best of modern machinery, and enter the field again—masters of their business, and all the conditions of competition greatly in their favor. Seven companies have been thus organized and are now in successful operation.

The latest addition to this list is the Beacon Falls Rubber Shoe Co., organized by George A. Lewis, one of the original directors of the United States Rubber Co. The following announcement has just appeared conspicuously in the boot and shoe trade papers:

BEACON FALLS RUBBER SHOE COMPANY,  
OF BEACON FALLS, CONN.

With a large capacity, splendid new equipment, experienced management, and ample capital there can be no doubt of success. George A. Lewis is the president. Mr. Lewis for thirty years was a successful manager of one of the largest companies. The general manager is A. D. Warner, for years superintendent of the Wales-Goodyear factories. The new company will win prosperity by deserving it. The product will excel anything heretofore offered, both in quality and style.

BEAR IN MIND THE NEW COMPANY; IT IS DESTINED TO FIGURE  
LARGELY IN THE RUBBER TRADE OF THE IMMEDIATE FUTURE.

This clarion note of defiance to the Trust has the true ring. It is the message of forceful men who know their business, know their customers, know well the opportunity before them—in a word, men who know their power. There is here no evidence to "make it seem as if the outside manufacturers were going to be placed in a practically hopeless and defenseless position." For be it remembered that these former directors of the rubber shoe Trust have had personal and practical experience with the Trust. They have been "insiders." They know all about the superior excellence of Trust management, and the "advantages" in buying crude material which the Trust enjoys.

Now what has happened in the rubber shoe trade will certainly be duplicated in mechanical goods. And this is why Mr. Havemeyer several years ago expressed the opinion that it would be impossible for one great company to control the rubber trade. The personal equation counts for so much that the man who knows his business, knows his customers, and can control even a small amount of capital, can defy the competition of the strongest Trust.

Whatever the plans of the promoters, therefore, the individuals and firms not yet considered can face the future very complacently. For even the pending negotiations can have no other effect than to benefit the business of that section of the trade which is not included. And, later on, it will be necessary for the combination to maintain prices at the highest possible level in order to pay dividends upon an enormously increased capitalization.

On the other hand, it is the firms in high favor with the promoters who are really in danger, and who need to keep a weather eye wide open as to the exact terms of the consolidation, and the prospect of realizing upon the tempting offers which may be proposed.

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It is highly important to understand clearly that the gentlemen promoting this enterprise are not rubber manufacturers, but financiers, bankers, and lawyers, who are just now in the business of buying factories from rubber manufacturers that they may sell stock in these factories to Wall street investors. Naturally enough they are governed by the economic law which impels them to buy as cheaply as possible and to sell as dearly as possible. If they are ready to make cash offers, the question is one easy of settlement; for the cash value of a going business is not hard to determine. But if they can buy profitable rubber factories for very little of their cash and very many of their securities, manifestly they accomplish a double purpose: they get control of the factories, and they sell the securities, not to Wall street investors, but to the proprietors themselves.

The latter is the form which most of these propositions must take, for the cash provided by the underwriters is limited in amount—about \$3,000,000, we are told—while there seems to be no limit to the amount of securities which the promoters can issue. Thus, in the boom year of 1892, when the effort to float this mechanical goods Trust was first attempted, the capitalization was modestly placed at \$15,000,000. In the first "authoritative statement" given to THE INDIA RUBBER WORLD, as to the plans of the present movement, the capitalization was fixed at \$46,000,000—\$23,000,000 preferred and \$23,000,000 common stock. In the next "authoritative statement," supplied through the "friendly intermediary," the capitalization was reduced to \$30,000,000—\$15,000,000 preferred and \$15,000,000 common stock. But boldness has won full many a good fight. In the articles of incorporation the capitalization is now definitely fixed at \$50,000,000. Evidently rubber securities are elastic. As Col. Sellers would say, "There's millions in it." But we must be permitted the humble reflection that \$3,000,000 in cash is a very insecure foundation for \$50,000,000 of securities.

Manufacturers who may have factories for sale, therefore, should bear clearly in mind that the sale of a property which is paid for in Trust securities amounts, practically, to giving the promoters control of the business, and in addition supplying them with the capital necessary to their operations in Wall street. Combinations of that kind have been formed in the rubber trade before. It is entirely possible to form them again. The promoters and underwriters are quite ready to assume the responsibility, provided the rubber manufacturers are willing to advance the capital and assume the risk.

\* \* \*

When the combination in the rubber shoe trade was formed, in 1892, it was widely announced "that no shares of the company will be put upon the market." At least such was the assertion of the leading promoter, in an interview in the New York *Tribune* of March 31, 1892, and similar statements appeared elsewhere, together with the promise that *all the stock would be taken by the shareholders in the companies to be combined*. This was substantially true in the beginning, but within a short time the stock was offered in Wall street, where it has been dealt in ever since. During these seven years a considerable volume of the stock has been sold to the investing public. But millions of both the preferred and common stock are still held by men in the rubber trade, and most of this is certain to be pressed for sale as fast as the public can be induced to take it during these boom times.

A new combination in the mechanical goods line can not hope to succeed better than the rubber shoe combination. It has required seven years to create only a partial demand for shoe Trust shares. How long it will take to realize on the new shares, in competition with the other rubber shares now pressing hard for sale, and also in competition with the millions upon millions of other "industrials" now flooding Wall street, is a mere matter of speculation. It is the wildest fancy to suppose that, because handsome profits have been made in Wall street on shares of the rubber shoe combination, this process can go on indefinitely through the organization of new Trusts. It outrages common sense to assume that this gigantic undertaking in the rubber trade can quickly succeed at a time when exactly similar speculations of even greater magnitude and far more substantial merit have been formed and are fast forming in every other line of industry.

During the year 1898 the capitalization of these industrial Trusts amounted to more than one billion of dollars. Hundreds of millions have been added to this stupendous total since the first of the year, and the movement seems to grow with each passing week. At the moment there is high promise of great success, and wilder enthusiasm among promoters than any country or any age has ever known. The crisis seems afar off—but only so to the unthinking! The wise heads of the investing world see plainly enough that the very impetuosity and magnitude of the movement must hasten the crash which no human power can avert.

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And it must not be lightly supposed that this warning represents a mere individual opinion. On the contrary, for weeks past conservative bankers, honest brokers, expert financiers, financial editors—in short, the full force of prudent and intelligent opinion—has been echoing and re-echoing the most solemn warning of a pending crash in Wall street. Perhaps the most significant among these warnings is the following from the financial editor of the *New York Sun*, an observer of fifty years experience and widely known by his *nom-de-plume*, "Matthew Marshall." On January 23, he says:

"Speculation on the Stock Exchange continues to be as lively as ever, and shows no signs of speedily dying out. On the contrary, the whirlpool is broadening and deepening and has sucked into its vortex a number of stocks which have hitherto escaped its influence. The minds of most of the operators are in a state like that of the Keely motor victims, in which every rumor favorable to their wishes gains credence with them, and nothing is too wild and improbable for them to swallow. Brokers are reaping a rich harvest, seats in the Exchange are in demand, and the Exchange itself finds it necessary to enlarge its quarters to accommodate its immense business. What and when the end will be the most experienced observers are unable, and the most distrustful unwilling, to predict."

The greatest weight attaches to this warning, because the writer stands apart conspicuously as one of the very ablest champions of the modern Trust idea. But the Trust which he believes in is the one which actually does effect economies in production and which actually does reduce the price of its products to the consumer. We of the rubber trade know, however, that the rubber shoe Trust began by advancing prices, has improved every possible opportunity to make a further advance, and has never reduced prices until forced to it by competition. Of the Trusts of this character Matthew Marshall says:

"There are among us too many able men seeking employment, and too many owners of capital ready to lend it to them, for a permanent monopoly to be established in any branch of industry. Great as is the power wielded by corporations with great capitals, it is not greater than the power which can be brought against them whenever they overstep the limits of moderation. Competition can be suppressed only by making it hopelessly unprofitable, and the knowledge of this fact is a sure protection of the community against any ill effects of industrial imperialism."

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Among all the New York daily papers the one which stands apart conspicuously as the ablest financial authority, the one which is most forceful and most fearless in expressing its opinions upon Wall street affairs, is *The Evening Post*. In a striking editorial published on January 28 last it says:

"The last few weeks of almost unrestrained outside demand have not been wasted by the expert 'promoter' of Wall street. Such periods are his harvest seasons. A recent careful compilation by the *Financial Chronicle* shows that new corporations of the so called 'industrial' type, organized during 1898, reported aggregate share capital of no less than \$916,000,000. A good part of these shares is now being rapidly floated on the sea of Wall street speculation, with the expectation that it will land, eventually, in the hands of the 'outside public.' No doubt much of this capital stock is intrinsically worthless—a

mere bundle of paper certificates given away to the incorporators as a 'bonus' on their moderate investment of real capital. But when, as has happened, the quoted price of even these shares on the Stock Exchange is doubled or trebled, and when they freely pass current at such a valuation, it must be evident that the void in the supply of investment issues, good or bad, is being filled with great rapidity. In other words, supply is overtaking demand.

"We do not profess to know when it will fully overtake it, or whether it has already done so. But what every experienced man does know is, that a season of excited stock speculation creates fictitious values, that sooner or later these bubbles must be punctured and prices forced back to their proper level, and that when this happens, a large part of this 'outside public' will be left with securities in their hands, some of them intrinsically worthless, others bought at a valuation which may not be reached again in years, if ever."

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We have quoted some history of the Trust movement in the rubber trade, and that history speaks for itself. Let us now quote some Trust history in Wall street—and let that history also speak for itself.

It will be remembered that back in 1891-92 the Cordage Trust was the most conspicuous example, and at the same time the most disastrous, in all Trust history. The shares were listed on the Stock Exchange first to the amount of \$15,000,000, and later to the amount of \$25,000,000, and the public were induced to buy the issues, only to find very soon little or nothing to show for their money.

In order that a fictitious appearance of prosperity might enable the manipulators of the shares to further their ends, dividends wholly unearned were paid with borrowed money, and the stock was marketed at prices varying from 75 to 147. Competition was the incurable canker, and the final collapse was brought about by an attempt to float another block of \$2,500,000 of "preferred" stock to buy an outside factory, at a time when the men who did it were having trouble to find money with which to pay dividends on the stock already out. The stock dropped from 147 to 11, and now "Cordage" is not even quoted in the financial papers. It has disappeared completely from public view, leaving behind a veritable stink in the nostrils of honest men.

Shortly after the collapse of the Cordage Trust, the bottom also dropped out of "Whiskey" and "Reading," and commenting on these events, under the date of May 13, 1893, the *New York Evening Post* said :

"Certainly recent events have shown that the dangers of trusts have been greater and more real to investors in their stocks than to consumers or the general public. A combination of certain factories is made, under which an extravagant valuation is put upon each. To earn dividends upon the watered capital thus created a larger selling price must be had. The moment that advance in price is made some one starts to build an opposition factory, to be in turn bought out at a high price. This again forces the combination to attempt an advance when the succession of events is repeated. The distillers' or whiskey corporation is a good example of this sort of financiering."

"But even when honestly formed, with fair amounts of bonds or stocks, the huge corporation has a new difficulty to face—namely, a lack of running capital. It takes money to run different mills in different states, to purchase the raw material in

advance of its manufacture, and to carry the finished product until finally paid for. Distributing to former mill-owners but a reasonable amount of stock in the new combination will not remove this difficulty. Generally the managers try to find relief by putting out commercial paper to an extent which even a slight curtailing of credits would render dangerous.

"But when we pass from such companies to those whose capitalization bears no real relation to business prospects the difficulties are much increased. The commercial borrowing is on an even larger scale than before, with the additional burden of the larger sums required for individuals.

"It is becoming increasingly important that there should be publicity in the reports of modern corporations, in sufficient detail so that the methods of the kind suggested could be uncovered and checked before heavy losses could be inflicted upon deluded shareholders."

We direct the special attention of our readers to the clause in the charter of the new Trust, published elsewhere, which provides that "no stockholder shall have any right to inspect any account or book or document of the corporation except as conferred or authorized by the board of directors, or by resolution duly passed at a regular or special meeting of the stockholders."

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With most of these facts already in hand, and having resolutely determined upon a policy of outspoken opposition to the formation of the Trust proposed, on December 28, 1898, our Mr. Dunlap sent the following telegram to several firm friends and old patrons of THE INDIA RUBBER WORLD :

"Delay signing any trust agreements. Highly important developments coming."

On the same day he wrote the following personal letter to the same persons :

"Supplementing my telegram of even date, I deem it my duty to advise you very earnestly to refrain from signing any agreement of any character which would commit you to the formation of a Trust or combination until you hear further from me. I am in possession of facts of the highest importance to all the established and influential firms who have been mentioned in connection with the proposed combination announced in Wall street recently. And I simply do not propose to see the old patrons and firm friends of THE INDIA RUBBER WORLD take action in this matter without the fullest information. I am going to the very bottom of things, and shall be ready within a few days to talk freely and fully with you."

This was a needed and timely warning. It aroused caution. It substituted deliberation for haste. It has resulted in a delay of a month in the progress of many negotiations. We now give the same warning to the entire trade—with the same end in view. Deliberation and careful inquiry are very necessary to a right decision.

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One word more. In its opposition to this Wall street enterprise THE INDIA RUBBER WORLD must not be understood as entering upon a crusade against any existing interests in the rubber industry. We have no desire and no intention to call in question the reasonable, logical, and perhaps necessary agreements and combinations which have been formed in various branches of the industry. To protect themselves against senseless and fraudulent com-

petition it may often become necessary for manufacturers to unite in regulating prices, or to combine certain identical interests and thereby save much needless expense.

What we oppose is a movement of Wall street operators which has for its avowed object *the ultimate control of the entire rubber industry*, under a single influence—that control to be gained by a bold policy of merciless extermination for "those concerns which the organizers of the new concern do not propose to take in." The weapon with which this extermination is to be accomplished, is the "power, wielded by a single hand," to control both the supply and price of crude rubber. This is, of course, impossible, as experience has repeatedly demonstrated; and hence there is no permanent danger. But sane men can see plainly enough that if this movement be permitted to go on without opposition, without criticism of its methods, and without exposure of its economic fallacies, it would undoubtedly cause grave alarm, plunge the industry into a maelstrom of wild speculation, and give a company of Wall street promoters despotic power over the fortunes, the happiness and the homes of hundreds of families now enjoying a secure income. It is, in short, a contest between Wall street and the rubber trade. On one side is a little crowd of company promoters who seem to be strong only because their weakness is not known to the outside public. Opposed to them is an army of resourceful men who have built up the rubber industry, and who can rebuild it as often as may be necessary. In such a contest there can be no doubt of the issue: The men of the rubber trade will win gloriously. And long before this passing craze for Trusts has run its course, we shall see the ranks of anti-trust converts augmented by scores of men who are just now dazzled by the glittering possibilities of Trust "securities."

#### PRACTICAL DIFFICULTIES IN THE WAY OF A MECHANICAL GOODS COMBINATION.

WHEN the question arises as to the possibility of amalgamating all the manufacturing plants that are now run on mechanical rubber goods, one naturally inquires how many there are in the United States, and how much of a problem is involved. The ordinary investor, in his ignorance, is easily brought to the belief that there are only a half dozen or a dozen companies at most, in the whole country. As a matter of fact, there are to-day sixty-five concerns, with manufacturing plants of their own, and most of them fairly busy. Nor does this include ten concerns that are running on small specialties that could be easily transformed into genuine mechanical lines, nor the mechanical departments in the various druggists' sundries factories, which cut a considerable figure in general mold work.

The sixty five concerns mentioned have according to commercial agency reports, a paid in capital of nearly \$25,000,000. The majority of them are of medium size and do a small, conservative, but profitable business. Take one for instance, located close to New York, running wholly on molded specialties. It has a fine equipment of

rubber machinery, runs nineteen presses day and night, and yet is so little known that with the exception of the supply men who furnish the raw materials, and a few large customers in whose interest it is run, hardly any one in the rubber trade knows of its existence. The owners of this factory, by the way, are not practical rubber men, but some years ago took over the plant for debt, and, in order to get their money back, were forced to run it. They solved their own problems and to-day are making mold work in competition with the largest, best equipped, and most skillful companies in the country, and are doing it profitably. In other words, the individual initiative which necessity brought to the front, and which the Trust idea would try to throttle, proved of more value than experience, skill or capital.

To one familiar with the mechanical rubber business, it must be apparent that no complete amalgamation is possible. The industry differs widely from any other branch of the rubber business. Mechanical rubber manufacturers are familiar with more grades of rubber, are greater experts in the use of reclaimed rubber and of substitutes, use hundreds of different ingredients in their compounding, have an infinite variety of cures, have factories in which there are hundreds of special machines designed for special purposes, and, to reach their customers, are brought in contact, not only with the whole engineering trade, but must know more or less of almost every line of manufacture that the country affords.

This sort of schooling has developed a class of men who are resourceful to the last degree, who can make combinations—chemical, mechanical, and commercial—such as the rubber shoe manufacturer, for instance, never dreamed of. There are dozens of born leaders in the trade; and the factories are full of young and able men who are simply waiting the opportunity to branch out and outdo those who have long been their mentors. There are no capitalists wealthy enough to amalgamate or purchase, or in any way corner all of the ability that is represented in this marvelous branch of the rubber business, and if it were possible, a recent New England experience would be so many times repeated that the crop of new and dangerous rivals would be of mushroom growth. This experience is one that the trade is still talking about. A man absolutely unlearned in the rubber business bought a little machinery and a couple of presses and begun making molded rubber mats; the one thing in the whole line of mechanical goods that would seem least likely to yield a profit. When he put them on the market, they were the best in texture and finish that had been seen for years, and the price so reasonable that he could hardly fill his orders. One of the oldest companies in the country, manufacturers of exactly that same line of goods, sent their own molds to him, acknowledging that, expert as they were, they could not compete. The popular belief was that he must be losing money. Careful investigation, however, showed that he had solved the problem in a novel way of his own, and that he was doing a profitable business.

Again, take the mechanical line of the National India Rubber Co. for instance. This old company have always

done more or less of that kind of work. They have had years of experience, good men, and every facility. When they came into the United States Rubber Co. and had the advantages in the purchase of crude materials that are suppose to accrue from such a consolidation, when they had all that money could buy, and the brains of that great corporation to do their thinking, one would suppose that the National products in belting, packing, hose, and goods of that kind, would have so increased in volume, that even that vast plant would have been too small for their business. But nothing of the kind happened, and to-day there are large users of mechanical goods who are not even aware that that is one of the lines manufactured at Bristol.

Another phase of this question that a mechanical Trust would have soon to face, would be the attitude of the manufacturers of reclaimed rubber. At least ten of the mechanical concerns that would be reckoned in a general consolidation, have complete plants for the manufacture of their own reclaimed rubber. In the interest of economy, these would probably be consolidated, just as others were in the case of the United States Rubber Co., and in this consolidation, it would be folly not to build a mill big enough to supply the whole Trust. Then if the outside companies who make a business of reclaimed rubber pure and simple, were not purchased, and that at a good round price, what would be their attitude? The answer is a very simple one. Forced out of business, with a fine equipment of engines, boilers, grinders, and vulcanizers, three months time and the expenditure of very little capital, would transform them into fully equipped mechanical rubber mills, which the Trust would be forced to fight or else to buy. Indeed, with just such a contingency in view, one large reclaiming plant has already placed an order for additional machinery and has secured the necessary talent to successfully operate it, and has a man on salary to market the goods.

In a word, the trade is too big, too complex, and too strongly individualized to be dominated, either by one man, or any set of men, no matter what their administrative ability, nor how plethoric their pocketbooks.

#### THE FAVORABLE OUTLOOK FOR BUSINESS.

**A**N improvement in the general business outlook, as compared with that of a year or so ago, is apparent from the unprecedented production of and demand for iron and steel, increased exports of merchandise, heavier railway earnings, and larger clearing house transactions, together with improved agricultural conditions—which, as much as any other single interest, lie at the basis of our prosperity. The rubber interests, too, are more active than for years past, and the volume of business in this line probably larger than ever before.

There has been, at no time since our last serious panic, any particular "boom" in business, which doubtless has prevented those persons who have been looking for some such indication of prosperity from noting the gradual betterment of conditions which all the while has been in pro-

gress. Instead of factories being idle or on half time, they are now running full, and new ones are coming into existence. There are fewer unemployed wage earners, and the rate of wages equals the best standard of the past. Products are selling more freely, and collections are made with more ease. There are industries, of course, which prove exceptions to these generally favorable conditions, but when, in the history of the country, was this not true?

No doubt there are lines in which the profits realized are not commensurate with the volume of business done, judged by the past, but in this respect all industries are tending toward a worldwide level. There are manufacturers already in a position to make money under existing conditions. Those who are not, must amend their practice until they can do as well. But it must be kept in mind that the best profits are reserved, as a rule, for the manufacturer who is able to take the lead in new lines of production, while the smaller go with the lines which everybody in the trade is contending over. A feature in the iron and steel trades which has proved of great benefit in tiding producers over periods of dullness has been increasing sales abroad, and without doubt something of the same kind will yet prove true in the rubber industry.

Apropos of business conditions, it is a fortunate circumstance that no legislation is now in prospect at Washington which threatens to unsettle values or to disturb existing lines of national policy. As for international relations, Congress is now considering a treaty of peace, which ought to be a more favorable omen than the threats of war which filled the air when the preceding session assembled. Meanwhile, war has been declared, and fought to a termination under conditions encouraging rather than otherwise to American industry and commerce.

A RECENT EXPERIENCE WITH FIRE in a tall office building in New York city suggests the necessity of increasing the efficiency of existing appliances for fighting fires. Above a certain distance from the sidewalk it is now impossible to throw or at least to direct streams of water, but this fact is not likely long to limit the height of buildings. Larger hose, machinery for raising it, and stronger water pressures will now be demanded, and in the evolution of these improvements the rubber manufacturer has an opportunity to become an important factor.

"THE SUCCESS OF THE RUBBER TIRE FOR BICYCLES has not been more marked than that of the rubber vehicle tire promises to be very soon," THE INDIA RUBBER WORLD predicted a few years ago. While the advance made in this respect has not been altogether on the lines suggested in the article quoted from, it has been greater, on the whole, than it was then anticipated would be the case by this time. When rubber tires can be made that stand the test of service on the heavy fire engines used in New York, as has been done, it ought not to be difficult to equip with rubber every other sort of wheeled vehicle used on city streets. The consumption of rubber for vehicle tires is very large and constantly increasing, and it is of particular interest to note that, while such tires were used in Europe before they were known here, it remained for American ingenuity to produce them of a quality good enough for this market. The next step should be to put our tires in the lead in the foreign field.

## THE RUBBER TRUST INCORPORATED.

**T**HE Rubber Goods Manufacturing Co. filed articles of incorporation on January 25, in the office of the county court clerk of Hudson county, N. J., and on January 26 with the secretary of state, at Trenton. The incorporators named, with their addresses, are:

WILLIAM A. TOWNER, No. 304 St. James place, Brooklyn.  
 HENRY STEERS [No. 10 East Thirty-eighth street, president Eleventh Ward Bank.]  
 THOMAS RUSSELL, No. 287 Broadway, New York [president Union Selling Co.]  
 ALVAH TROWBRIDGE, No. 25 Nassau street, New York [vice president of the National Bank of North America.]  
 ULYSSES D. EDDY [Rye, N. Y., and No. 30 Broad street, New York. President Flint, Eddy & Co.]  
 G. W. HEBARD, No. 120 Broadway, New York [vice president Westinghouse Electric and Manufacturing Co.]  
 R. L. EDWARDS [president of the Bank of the State of New York.]  
 PERCY CHUBB, Nos. 5-7 South William street, New York [of Chubb & Son, marine underwriters.]  
 HERBERT J. DAVIS [No. 65 Wall street, New York. President of the Davis Sulphur Ore Co.]  
 ALDEN S. SWAN, No. 151 Maiden lane, New York.  
 C. H. DALE, No. 131 West 119th street, New York [president Peerless Rubber Manufacturing Co.]  
 CAMILLUS G. KIDDER, No. 76 Highland avenue, Orange, N. J. [of the legal firm of Ivins, Kidder & Melcher.]  
 CHARLES STEWART SMITH, No. 25 west Forty seventh street, New York [director in the United States Rubber Co., ex president of the New York Chamber of Commerce, and senior member of the dry goods commission house of Smith, Hogg & Gardner.]  
 GEORGE S. DEARBORN, No. 11 Broadway, New York [president of Dearborn & Co., shipping merchants.]  
 ANSEL L. WHITE, No. 36 South street, New York [senior member of White & Co., chandlers.]

The objects of the Rubber Goods Manufacturing Co. are declared to be the manufacture and sale of goods, "but more especially all classes of goods of which India-rubber, Cauchoo, Gutta-percha, Balata, or any of their substitutes, are a component part, as well as all materials utilizable for the manufacture of such goods, and to deal in, manufacture, and sell any and all other classes of goods, the purchase, manufacture of, or sale of which may be desirable in connection with, or which may contribute or conduce to the advantage of the company."

The company is empowered to buy and sell all kinds of property, real and personal, including shares in other corporations, and to contract with citizens or corporations formed under the laws of any foreign country, or any foreign government, for the purchase of crude rubber or other merchandise, or the purchase or rental of rubber lands, or to contract for concessions from said governments. Also, to issue bonds, secured by mortgage, and to have offices in any state or territory of the United States, or any foreign place or country.

The authorized capital is \$50,000,000, in shares of \$100 each, of which 250,000 shall be preferred stock and 250,000 common or general stock. Such shares shall be issued in such amounts and at such times as the directors may determine. The preferred stock shall be entitled to cumulative dividends at the rate of 7 per cent. per annum. The amount of capital stock with which the company will commence business is \$1500—being one share of common stock for each of the fifteen incorporators named.

The duration of the company shall be unlimited. The number of directors at any time may be increased by the vote of the board of directors, who have the power to elect additional members. They have the power, also, to amend the by-laws at any regular or special meeting. The directors are invested with sweeping financial powers, in addition to which it is provided:

9. The board of directors shall from time to time determine to what extent and at what times and places, and under what conditions and regulations the accounts and books of the corporation or any of them shall be open to the inspection of the stockholders; no stockholder shall have any right to inspect any account or book or document of the corporation except as conferred or authorized by the board of directors, or by resolution duly passed at a regular or special meeting of the stockholders.

The location of the new company's principal office in the state of New Jersey is at No. 60 Grant street, Jersey City. The name of the agent therein and in charge thereof, and upon whom process against this corporation may be served, is the "Corporation Trust Co. of New Jersey."

The incorporation papers were filed by Ivins, Kidder & Melcher, a legal firm of which William M. Ivins is at the head.

## MR. FLINT INTERVIEWED.

It will be noticed that the list of incorporators does not include the name of the gentleman who has been regarded as the chief promoter of the Trust. He has been interviewed by the press, however, as indicated by this extract from the *New York Journal of Commerce* of January 27:

"Charles R. Flint, organizer and treasurer of the United States Rubber Co., which controls the interests of the manufacturers of rubber footwear in this country, said yesterday that he had succeeded in bringing together the leading manufacturers of rubber goods of a general nature, and that the organization of the new company would shortly be completed.

"Some time ago I was requested to undertake the organization of the company," said Mr. Flint, "and now that it has been organized we will hold the matter open for perhaps ten days to give all who desire an opportunity to come into it. Then the plan is to be put in active operation. I am not willing to say at present what companies have signified their intention of joining the new company, but I may say that the policy of the Rubber Goods Manufacturing Co. is not to acquire all of the companies engaged in the manufacture of rubber goods, but to acquire properties that have demonstrated a capacity to manufacture goods cheaper than their competitors. By the combination of such concerns and through the securing of special facilities for obtaining crude rubber it is expected that the cost of producing rubber goods can be still further reduced."

THE INDIA RUBBER WORLD is advised, with regard to the rubber sale at Antwerp, on January 20: "The rubber offered was nearly all bought. Two hundred tons were sold at about 2 cents above official valuation, which prices were astonishingly high at the time of the inscription. A fair proportion of the rubber was bought by manufacturers, and the balance by dealers or speculators. The prices paid were, in our opinion, above the natural market value. To-day the market is somewhat stronger, and perhaps the dealers will realize a profit on their transactions. The next sale will be held on February 10, and there will be quite as much rubber sold at this auction."

## HOOLIHAN ON THE "LIMITED OPPORTUNITY" COMPANY.

"**T**HAT New Rubber Thrust bates them ahl," said Hoolihan on the occasion of my next visit.

"What new trust?" I asked, feigning innocence.

"Phwy the Rubber Thrust Company Limitid, Limitid."

"Limited Limited?"

"That's phwat ut is. Sure its a triumph av promotive janius. Have ye read the charrter?"

"Not yet, but I plan to at the first opportunity."

"Rade it, me bye, an larrn how the perrsecutid managemint av a moderthn thrust may relave thimselves av the infloence av the troublosome sthockhouldther. Its ahl in the sicond Limitid."

"Explain, please," said I.

"I suppose you know phwat the ardinary single limitid manes?"

"Why one is only liable for the amount invested in the stock of a company."

"Exactly. That's limitid liability; now the other limitid is expressed in a clause in the charrter phware it sez that no sthockhouldther shall be allowed to examine the bukes or anny docimint av the company widout the consint av the directhors, an that's limitid opportunity. Sure it bates the ould toime liability limit ahl to flindthers."

"It doesn't seem possible"—

"O yis it does. Annything is possible in the prist staate av the market. An phwy wouldn't wan what organizes an controls a big thrust sake to relave himself av the pestherin' av ignirint houlders at its sthock? Suppose they wish ter paay dividinds widout urnin' av thim, ter kape the sthock up? Are they to be throubled be some craank av a sthockhouldther clamrin' fer a look at the bukes? Suppose they want ter buy the wreck av the *Maine* an paay a big commission ter the dago phwat blew it up. Do they want the proice known wid ahl the detaails be some fool av an invistor phwat ud have acciss to the docymints an' bukes and get matter so he cud deman' an investigaation? Suppose"—

"But the stockholders must elect honest directhors."

"Av coarse; who is intimatin' that ahl av them ain't honist? As you saay, the sthockhouldthers elict the directhors—saay foive av them fer exaample. Two av them work together in ahl things, three work as they plese. The wake after the matein' they taake in another big facthory, wan ownded be frinds at the two, an appint the laate owner directhor."

"Hold on!"

"Howld on *you*. Thin they have a matein' an doan't agree on some shmall point, an appint sthill another directhor, a frind av the two—"

"Look here, you are talking nonsense; they cannot do such things," I interrupted, with some heat.

"You know nothin' av Limitid Opportunity Companies," said Hoolihan. "Av I rade thur charrter roight, its just phwat they can do. An as manny more as they want."

"Do you think it right?"

"They didnt askh me opinion an that," said Hoolihan, thoughtfully. "Uts me proivit thought that the person phwat drafhted the dockymint had mislaaid his conscience, an that the respectable banker min av undthertaken—"

"Underwriters you mean."

"Uts ahl the saame to the sthockhouldther. I'm thinkin'

that ahl thoase honist min are not knowin' av thim clauses."

"Knowing this, will you sell them your mill?"

"Sure I will, av they want ut. Av coarse I'll sell anything I have but the ould woman an' me brogue," was the honest reply.

"For how much preferred and how much common?"

"Saay, I suppose I'm ould fashioned an' maaybe a bit av a errrank, but bein' a sthockhouldher alwaws gins me the big bid. Sure I'd be craazy to know phwat was an the bukes an phwat aregmints was pasht, soa I think I'd sue for caash or kape on runnin the Farlarn Hoap Rubber Co. as a rival to the Thrust."

"But they will shut off the supply of crude rubber," I said.

"Divil a bit. Thot scare is oaver. Wan av the biggest European importers has insured me fer tin years—a man able to buy the Thrust av he wanted to, soa I'm falih' pretty well. But saay, I'd loike to be the boss directhor av that Thrust."

"What would you do?"

"Do? I'd pass a resolution maakin' ahl the clerks an' toipe-writhers, an' saalesmin, an' superintendents, an' ahl the workmin' paay foive per cent av their wages into wan pool fer a shrinkin' fund."

"Sinking fund you mean?"

"Divil a bit; shrinkin' fund it ud be. Firrst I'd raise their paay, ye see, to maake it aisy. Thin laater assess them. The toatal ud be a big sum—"

"What would you do with it?"

"Phwat business is that av yours, or the sthockhouldthers, aither, fer that matther? Ashk the directhors, an' they through me ud refuse to tell, and that's one av the beauties av a Limitid Opportunity Company."

## RUBBER GOODS IN SOUTH AMERICA.

**A**N English mechanical engineer—Mr. Thomas Wasley—who was employed professionally for some years at Valparaiso and elsewhere on the Pacific coast of South America, later visiting different countries on the Atlantic coast, said in response to some inquiries from THE INDIA RUBBER WORLD:

"I saw a great deal of leather belting used in South America, but it was all leather—no rubber. As to hose, belting, etc., there is quite sufficient of that used to justify American efforts to secure the trade, and wherever leather belting is used, rubber can also be used. I don't say there is no rubber belting in South America, but that I never happened to see any."

"There are a thousand and one articles of rubber used in South America, as everywhere, and while I cannot say for certain, I am almost sure the greater portion comes from Great Britain. I have an idea that the North British Rubber Co., Limited (Edinburgh), do a big trade in South America."

It may be of interest to add that in a recent year the British and American exports of rubber goods to several of the southern countries were as follows:

To	British.	American.
Colombia.....	\$ 59,690	\$14,133
Chile.....	64,215	6,839
Brazil .....	239,495	23,272
Uruguay .....	16,000	706
Argentina.....	77,200	3,212

Germany is also an exporter of rubber goods to these countries, but on a smaller scale, except in hard rubber.

## WHY ONE MANUFACTURER OPPOSES THE TRUST.

**A**SUCCESSFUL rubber manufacturer, who opposes the projected trust on the ground that neither his own interest nor that of the trade as a whole would be promoted by consolidation, was asked to favor THE INDIA RUBBER WORLD with a statement of his views in some detail. What follows is the substance of what he said verbally:

"The first objection to joining a combination of manufacturers, such as is proposed in the rubber trade, is that each factory is thereby deprived of the direct personal attention of a proprietor whose chief interest is bound up with its success. It is true that most of the rubber factories are owned by corporations, but at the head of each is a man who has built up the business and who is the principal owner. James Gordon Bennett is no less the owner and conductor of the New York *Herald* if his business happens to be incorporated. It is not enough that the factories associated under a trust should remain technically in charge of their former owners, organized as a board of directors. It is not in human nature that men working on salaries for a great corporation should devote to the business of manufacturing—which is far from being all routine—just the same degree of attention and energy that is called forth when each is the owner of a factory dependent upon himself for success, and the profits of which go into his own pockets. This opinion is confirmed by the management of a mutual factory insurance company, who hold that a factory risk becomes less desirable as soon as the business passes from direct personal control into that of the trust. The care given to the business at once shows a falling off, and the precautions against fire become less vigilant."

"No doubt there are items in the cost of manufacture on which a saving could be effected by consolidation and concentration. But new problems then arise, with the likelihood that the saving made in one direction will be offset by new expenses or the lack of economy in others. It is not the cost of manufacture alone that is to be considered—the selling end of the business is quite as important. The rubber shoe trade is still handled largely through jobbers, but the middlemen are fast disappearing in the mechanical goods line. Nowadays the greater part of our output is sold direct to consumers, our books showing the names of many thousands of consumers. These have been gained, and their patronage must be retained, through the direct efforts of salesmen, based upon a close personal acquaintance with the buyers. The single factory, under sound management, which includes close attention to all the peculiarities of taste and demand of its customers, can keep very much more closely in touch with them than a great corporation which depends more upon keeping down competition than in pleasing customers as a means of retaining their trade. It is a part of the trust idea to compel the patronage of buyers, by making it impossible for them to buy elsewhere."

"There will be no advantage in bringing the rubber companies together if all the existing factories should be kept running, and all the present employés retained. The first step in economy would be to shut down some mills and to discharge managers, salesmen, superintendents, and mill operators. And here is the weakest point in the position of the trust. Every effective man who found himself out of a job would naturally seek employment in the rubber business again, as being that for which he feels best fitted, and thus the land will soon be dotted with competitors of the trust."

"Mr. Henry O. Havemeyer, the great sugar refinery man, once said that while it was possible to control the sugar trade by a trust, he did not see how a mechanical rubber goods trust could be maintained. All sugar is practically alike, the grades are so few, and the product of the refineries is marketed in large quantities to middlemen. But mechanical rubber goods are made in almost unlimited variety and sold for the most part in small lots direct to the consumer. Besides, said Mr. Havemeyer, when all the existing sugar refineries are once acquired by a trust, a new one cannot be started without the investment of hundreds of thousands of dollars. But a competent man who finds himself turned out by a trust can start a new factory with \$10,000, and begin at once to cut into the business of the trust in the line of production to which he confines himself."

### THE POSITION OF A SMALL STOCKHOLDER.

"IF there is to be a rubber trust I should like to sell my shares in the \_\_\_\_\_ company before it is formed," said a minority stockholder in a rubber concern now doing a good business.

"I take it that the trust promoters will not deal with such a corporation as ours as a whole, but only with some of the larger holders of its shares, so as to gain a controlling interest, and then the small holders, like myself, will be nowhere. We can have no voice in the business, and our shares will be worthless. But even if all of us were considered, and I should have a chance to exchange my shares for trust certificates, I doubt whether I should be any better off. In my opinion the trust cannot succeed, on account of the competition certain to be developed, and its shares will not long be worth holding. There are a lot more young men in the trade who are in the same position as myself—in a position where we cannot possibly be benefited by the trust, but are certain to be injured. And the same thing is true of the smaller concerns as a whole, unless their owners should be able to sell out for cash. If they enter the trust with a view to continuing in business as members of it, they will only be at the mercy of stronger elements in it; their business will be managed for them by people who have no interest in their welfare, and they will be gradually frozen out, without anything to show for the business they now control."

"These small shareholders in rubber concerns, I may say without claiming any credit for myself, have been an important factor in the success of some of them. The fact that they own a part of the capital stock, and have therefore a chance to share in the profits, makes them work with greater zeal in the interests of their companies, and makes their connection more permanent. Even if I could sell my shares to-day for their face value in cash, I should not want to do so—unless I felt that they were likely to take a drop—for the reason that the money would be of no use to me without a good opportunity for reinvestment. Money in hand doesn't yield any returns, and selling out one's interest in a going business deprives one of an opportunity for work."

**TWENTY DOLLAR RUBBER BOOTS.**—A price list of the North American Transportation and Trading Co., at Dawson City, on October 1, quoted rubber boots at \$10 to \$20 a pair and arctics at \$6 to \$8. According to the United States consul, rubber goods from this country are preferred, in spite of the high rates of duty charged beyond the Canadian border.

## A FORMER EFFORT TO START A MECHANICAL RUBBER TRUST.

*A Notable Chapter of History in the Rubber Trade.*

THE nucleus of the new Rubber Goods Manufacturing Co., according to the best information obtainable, is the Mechanical Rubber Co., incorporated under the laws of New Jersey, October 17, 1892. The negotiations for the formation of the new "combine" have been in the hands of the same promoters as in the case of the former company, and the arguments advanced in favor of the movement are the same as were urged seven years ago. All of which lends interest to the following article from the New York *Herald* of October 18, 1892:

### ANOTHER GREAT RUBBER COMBINE.

Incorporation of the Mechanical Rubber Company in Trenton, N. J., with a Capital of \$15,000,000.

\$65,000,000 NOW IN THE POOL.

Many of the Directors of the United States Company, Recently Formed with \$50,000,000 Capital, Have a Hand in the New Deal.

STILL ANOTHER IS PROBABLE.

With the incorporation in Trenton, N. J., yesterday [October 17, 1892] of the Mechanical Rubber Company, capital \$15,000,000, by capitalists of this city, following closely upon the recent formation of the United States Rubber Company, with \$50,000,000 capital, the greatest combination of this country was effected.

While the two companies, both incorporated under the laws of New Jersey, are distinct corporations, most of the directors in each are the same, and both corporations will practically represent a capital of \$65,000,000 devoted to the same interests.

The United States Rubber Company was formed to consolidate the rubber boot and shoe interests, and in effect is a trust of that branch of the trade. The Mechanical Rubber Company will all but control the manufacture of hose, rubber belting, druggists' supplies, tires for bicycles and for sulkies, such as Sunol broke all records with, and the various hard mechanical rubber devices. The company is also authorized to make and sell all goods and materials into which rubber enters as a component part. [A long list of incorporators and directors is then given, and the article proceeds.]

At a meeting of the directors to-morrow afternoon officers of the company will be elected. It is said that Charles R. Flint will be made vice president, August Belmont treasurer, and L. [K.] McClymonds, of Cleveland, Ohio, general manager of the new company. Mr. McClymonds is prominent in Cleveland's big rubber company, and is considered one of the most practical rubber men in the country.

#### UNITY OF INTEREST.

How closely allied are the interests of the Mechanical and United States companies can be judged from the fact that James B. Ford is vice president of the United States company and William [Mahlon] C. Martin its assistant treasurer.

The principal office of the Mechanical Rubber Company will be at Passaic, N. J., where also will be one of the largest factories. Other factories will be established in Connecticut, Massachusetts, Ohio and Chicago, and negotiations are already under way with the Niagara Water Power Company for the construction near the Falls of one of the greatest manufactoryes in the United States.

It is expected that the Mechanical company's factories will be in operation at various points within a month. The \$15,000,000 stock will be divided originally between some three hundred or four hundred stockholders, the number to be increased hereafter at the discretion of the directors. Some \$500,000 will be paid in at once to be used for the building of new factories or the extension of those at present owned by the concerns that have amalgamated.

Plans for the organization of these two great companies have been considered for nearly a year, and Charles R. Flint is generally credited with having carried them to a successful issue. I called on him at his residence, No. 4 East Thirty-sixth street, last evening, and while he talked freely of the formation of the companies and the enormous growth of the rubber business in this country, he would not acknowledge what I had learned from other sources, that he was to be vice president of the Mechanical Rubber Company.

#### AN ENORMOUS INDUSTRY.

"The two companies will be entirely distinct organizations engaged in different branches of the business," said Mr. Flint, "although many gentlemen interested in one will have a hand in the other. The idea of the amalgamation of each trade in company to include the larger part of all such organizations in the country was to prevent conflict of interests.

"Two-thirds of all the rubber goods manufactured are consumed in this country. The trade has grown from \$795,000 in 1860 to \$27,000,000 in 1892, and it is essential that all branches should be conducted to the advantage of all the interests involved.

"There is still one branch of the industry which has no general organization—that of the manufacture of wearing apparel, such as mackintoshes, waterproofs, &c. With the formation of the United States and Mechanical Rubber companies the other branches are practically covered, although, of course, there are still a few companies in the country run on an individual basis."

#### ANOTHER COMBINE PROBABLE.

When asked whether anything had been done looking toward a further combine of the wearing apparel industry, Mr. Flint smiled.

"It is too early to talk about that," he said. "The idea of the present companies has taken nearly three years to work out, but it is not improbable that some time in the future the manufacturers of waterproofs and the like will get together."

From talks with others in the business I gathered that overtures had been made to such firms as Hodgman and Goodyear, and that a consolidation, which would mean another capitalization with several millions, was probable within the next few months. This would practically unite the whole rubber business of the United States in one grand series of trusts.

The charter of the Mechanical Rubber Co. authorized a capitalization of \$15,000,000, of which only \$5,000,000 was ever issued, indicating that the plans for combining the mechanical goods trade under a single management were not fully carried out. Within three months after its incorporation the Mechanical Rubber Co. executed a mortgage—of date of January 1, 1893—for \$2,500,000, to secure an issue of bonds to the same amount, which are still outstanding. Of these bonds, 1532 were to be applied to completing the purchase of the properties already acquired, 2018 were exchanged for the same number of £100 debentures of the New York Belting and Packing Co., Limited, and 1450 were to be issued only for payment for real property thereafter to be acquired. It is understood that the last mentioned bonds are still in the company's treasury.

Interest has been paid semi-annually on the bonds issued. On May 3, 1893, the first semi-annual dividend was announced, of 4 per cent. on the \$2,000,000 preferred shares and 3½ per cent. on the \$3,000,000 common stock. There is also reported, in the financial papers, a 4 per cent. dividend on the preferred shares, paid on May 21, 1894, and there the record stops.

Meanwhile, the quotations for the company's shares given by so reliable an authority as the *Commercial and Financial Chronicle*, are indicated by the following figures, chosen at random:

	Common. Bid.	Preferred. Asked.	Common. Bid.	Preferred. Asked.
August, 1895.....	.. 50	.. 75		
May, 1896.....	.. ..	31 40		
May, 1898.....	.. 10	15 25		
June 25, 1898.....	8 15	25 40		
January 21, 1899.....	30 40	75 90		
Total .....	(\$1,298,200)	\$402,000		

The average thus shown was \$69.53 per \$100 share for preferred and \$19.13 for common. The whole was then offered and bid in at a slightly higher total by Colonel Colt, representing a syndicate in which Mr. Flint, August Belmont & Co., and others were embraced.

*Such is the record of fulfillment of the promises made by promoters working in precisely the same interest and on the same lines as they are working to-day, in the attempt to bring out a combination in the trade.*

#### MAKING A MARKET FOR RUBBER SHARES.

NATURALLY the shares of a new Trust have no value at the beginning, because the investing public have no means of knowing what the merits of the scheme may be. As a means of illustrating how a "market" is made for a new issue, the following, in regard to the United States Rubber Co.'s first issue is reprinted from THE INDIA RUBBER WORLD of December 15, 1892. It is from an article by an expert in Wall street, who was then and is now the financial editor of an important New York newspaper:

"The trading in Rubber was started November 18, by H. B. Hollins & Co., who had a great deal to do with 'floating' the company. It was necessary to put matched orders in the stock to 'get it going.' One broker was given an order to 'bid' for the stock at a certain price, and another to sell at that price. This transaction is known as a 'wash' and is often resorted to to

keep up the price of a stock and as often to hold down the price. The buyer is the seller, and by making in this way high or low prices, may be able to protect 'long' interests (stocks bought to sell at higher prices) or 'short' interests (stocks sold when not possessed with the expectation of buying at lower prices to fulfil contracts for delivery).

"It is not easy to get a new stock in circulation. Speculators are reluctant to touch it until they can gage its true value, and be convinced that they can 'find a market' for it, or, in other words, be able to effect a ready sale for any they may have on hand, somewhere near the ruling price.

"The 'insiders' in Rubber have indicated by the way they have made quotations that they wish 40 to be considered the bottom price for the stock. They have made the fluctuations heavy to convey the idea that the person who buys at 41 or 42 is likely to have a chance to make 2 or 3 points. Only a year or two ago 'sugar' was selling around 50, and it has been above par or 100 for months. Chicago gas sold down to 37 a year ago, and last month it almost touched par. It is not always the high priced stocks that are most active. Reading is a low-priced stock, but the business in it has been the heaviest during the present year of any stock dealt in on the Exchange. Rubber may become both active and high-priced, as it represents a great and growing business."

The following table illustrates the range of prices on the New York Stock Exchange of shares in the United States Rubber Co. for several years:

YEARS.	COMMON.		PREFERRED.	
	High.	Low.	High.	Low.
1893.....	60 1/2	17	99 1/2	50
1894.....	45 1/2	33	99 1/2	79 3/4
1895.....	41	38 1/2	94 5/8	93 1/2
1896.....	29	14 1/8	89	65
1897.....	25 1/4	10	76 1/2	50
1898.....	48 1/2	13 1/4	113	60
1899.....	53 3/4	42 5/8	120	111

#### SOME WANTS OF THE RUBBER TRADE.

THE following inquiries come to THE INDIA RUBBER WORLD from patrons. We shall be pleased to be able to place them in communication with parties able to supply their wants. Correspondence in regard to these inquiries should refer to them by number.

[ 1 ] "Will you please recommend to us some house that makes fine India-rubber thread—about a No. 60 or finer—in the United States, or abroad? We have tried in vain several firms, but they don't make any as fine."

[ 2 ] "Please give us the names of any parties making molds for golf balls."

[ 3 ] "Will you please inform us who makes rubber massage rollers?"

[ 4 ] The superintendent of a western rubber factory writes: "I want to get onto some of the concerns in New York who do braiding. What I want is something by the mile made to fit the small end of a penholder, or words to that effect. If you will let me have the address of some of the concerns there I will take the matter up with them."

[ 5 ] An inquiry has been received for information regarding the "Steve Tobin"rubber" horseshoe pad.

## MR. FRED W. MORGAN'S VIEWS ON TRUSTS.

The letter which follows came in response to one from THE INDIA RUBBER WORLD, to Messrs. Morgan & Wright, the Chicago tire manufacturers, to this effect: "We notice that you have appeared in print in denial of the report that your company is included, or is to be included, in the proposed mechanical goods company. Would you object to favoring us with a note, to be published over your name, stating your position in this regard?"

**T**O THE EDITOR OF THE INDIA RUBBER WORLD: In reply to your favor of January 18, I would say I have read your articles relating to Trusts with much interest and have been much impressed with the apparent sincerity of Mr. Dunlap. It has been somewhat a shock to my sense of propriety, however, to see Mr. Dunlap step away from the platform of quiet and orderly argument and indulge in personalities.\* Most business men dislike quarrels, because no profit results in proportion to the energy expended. Disliking quarrels among themselves, they find neither pleasure nor profit in reviewing the quarrels of others.

Regarding Organization, Combination, or howsoever it may be named, it is a subject for calm consideration. As I understand you, it is not organization which you object to, as each separate manufacturing concern is an organization. The idea I get from your articles is that you object to any two or more of these smaller organizations joining their efforts and their capital. But to me it seems but a change of method, which in most cases appeals to the experience of the business men who combine their efforts in order to be able to specialize their brain and capital. In separate and independent organizations there are many men of good brain power, who are duplicating each other's work. Modern, high pressure economy, requires that no duplication shall be tolerated; hence the first act of combined industry is to diversify the brain energy which it possesses, the result being exhibited in the betterment of mankind.

Each man, of course, must view his surroundings through spectacles of such color as nature has furnished him. Through my spectacles it appears that the white race in this, our time, is moving forward and upward in its power to turn to use and to its comfort animate and inanimate nature. The history of this progressive movement may be indexed about as follows:

- The Cave Dwellers.
- The Hut Dwellers.
- The Hut Dwellers and Hunter with natural weapons.
- The Hut Dwellers and Hunter with artificial weapons.
- The taming and domestication of animals.
- The Shepherd as an individual.
- The Shepherd in community.
- The beginning of agriculture. No division of land.
- Agriculture in community. The division of land.
- The Artisan, made possible by over-supply of food.
- The Artisan in community. The beginning of the Shop.
- The Steam Engine. Combining of small shops into large ones.
- Use of Machines. Release of handicraft.
- Diversified Industry. Compelled by over-supply of food and of implements.
- Combination of Diversified industry. To increase comfort and to economize effort.
- Over-supply of any human necessity results in the setting

\* Mr. Morgan has evidently overlooked Mr. Dunlap's signed statement published January 9, in our "Trust Extra." Therein he specifically states that "this is a question of principle and not of personalities." We have abstained from personalities to the limit that has been possible, and we shall continue so to do.—THE EDITORS.

free of labor, which has been invariably employed to attack new forms of natural resistance.

My conclusion, then, is that the present development of combined effort simply shows the need of our time. It is part and parcel of our time. It is not a thing apart; it is an integral part. It is a natural condition, not an artificial one. It will not be denied. It can neither be hastened nor delayed.

The straw in the grasp of the rapids might as well shout, stop! as for a human voice to hope to be heard in the roar of progress. Yours very truly,

F. W. MORGAN.

Chicago, Ill., January 20, 1899.

## A VOICE FROM THE OTHER SIDE.

**T**O THE EDITOR OF THE INDIA RUBBER WORLD: In the very able showing up of the limitations of the Trust idea, in your January issue, I respectfully submit that you overlooked the one material fact, viz.: that the promoters' sole aim is to sell the stock through Wall street. That they have taken advantage of the most prosperous year the United States Rubber Co. has ever had, or ever will have, to put out an idea apparently so fallacious to those inside the trade as to appear impossible, is counterbalanced by the fact that the public are ripe to gobble up the stock. Once unloaded, what care the "underwriters" as to its ultimate value?

And, further, will not the fact that such a Trust will tend to keep up prices, benefit the small fry of the trade who are left out in the cold? I, for one, look without apprehension on the future, expecting a lightening of competition once the Trust gets to work, as they must keep up prices to maintain the market value of this stock until at least they have unloaded, which I fancy will take some years to accomplish. Yours faithfully,

PRESIDENT OF A RUBBER COMPANY.

New York, January 13, 1899.

## FRUITAGE OF THE TRUST IDEA.

A PROMINENT insulated wire manufacturer, speaking of the likelihood of his selling out to the trust in his line, said:

"I shall sell my business, but keep my factory. It is excellently equipped for the manufacture of mechanical rubber goods, and I shall at once start it up in that line."

"And then sell to the mechanical trust?" was the suggestion.

"Perhaps," was the smiling reply.

## THE TRADE IN HORSESHOE PADS.

**A** NEW catalogue of rubber horseshoe pads issued by Vought & Williams, iron and steel merchants, Nos. 363-367 Greenwich street, New York, contains illustrations of thirty different styles and makes of pads, including rubber alone and combinations of rubber with leather, canvas, etc. There are pads for general use in horseshoeing, and others specially defined for ailing feet. In answer to a request for an expression of opinion in regard to the state of the trade, Vought & Williams advise THE INDIA RUBBER WORLD: "As far as we are able to judge, the pad business is holding its own. We think it shows a slight increase."

Another catalogue, on a smaller scale, is issued by the Never-slip Manufacturing Co. (New Brunswick, N. J.), manufacturers of several types of horseshoe pads. This points out, as an important reason for the use of horseshoe pads, that "the unyielding asphalt, unresponsive to the rapid beating of the horse's feet, finally results in the upsetting of the animal's nerves, making him restive and ill tempered. Two years' driving on asphalt streets, where the shoe contact raises the temperature of the hoof to fever heat, will destroy the best pair of feet on earth."

## AUTOMOBILES AND THE TIRE PROBLEM.

THE development of interest in the "automobile" has progressed even more rapidly than was considered likely when, in June, 1897, after careful consideration, THE INDIA RUBBER WORLD published an article announcing the "Practical Introduction of the Horseless Carriage." Reference was had at the time to the promise of a wide use for such vehicles for passenger use, which alone would involve an important demand for rubber for tires. Now, however, the interest has extended to a remarkable degree in the use of self-propelling vehicles for every kind of traffic—delivery wagons for the great stores, express wagons, and trucks. There has been incorporated a great company, composed of New York capitalists, with a view to preparing to control the vast trucking business in this great city without the use of horses. While the initial cost of so-called "auto-trucks" will be much greater than that of the present vehicles, their use will eliminate the cost of horses and their maintenance, which latter is no small tax upon commerce. Another point is that a great gain will result from the saving in space now occupied by horses in the streets, and relieve a congestion which often interferes seriously with business.

The ultimate form of these vehicles, whether for passenger use or for traffic, and the motive power to be employed, can be determined only in practice, but in any event rubber tires will be indispensable, and for this reason THE INDIA RUBBER WORLD devotes space to the subject. The first consideration is that the growth of automobility will afford much work for the rubber factories in the production of tires. A second is that the prospective large demand for rubber for this purpose will tend to keep up the prices of rubber for all purposes.

\* \* \*

THE electric cabs in use on the streets of New York are owned and operated by the Electric Vehicle Co., who have devoted much work and much capital to the development of a practical self-propelling carriage. In an interview for THE INDIA RUBBER WORLD the chief engineer of this company, Mr. G. Herbert Condict, said :

"So rapidly have these vehicles grown in favor with the public that I believe that a thousand would find steady employment in New York alone, if we had them ready. It takes time to construct them, however, and there are yet unsettled problems in the detail of construction. Not the least of these relates to the tires to be used."

"One essential is easy riding. The only tire material that will assure this is India-rubber. Having started with pneumatic tires, we find that our public will be satisfied with no other. We have tried solid tires, but the public object to these after having tried the pneumatics. We have also tried cushion tires, but these lack resiliency. Under vehicles weighing 3200 pounds and upwards, cushion tires, unless inflated, become flattened and give the same result as solid tires. Hence we have experimented with every pneumatic tire that has been brought to our notice, but they all puncture too freely. We have tires in use that have run probably for six months, but in some instances tires have had to be sent to the repairer on the first day."

"We are in a position to welcome suggestions from every man, in the rubber trade or out of it, who can suggest a better construction of tires than we have yet secured. To day we have fifteen different tires in use, but are still experimenting in

the hope of being able to get something better. This has been an expensive piece of business for us, for which we feel that both the automobile interest and the rubber trade will find themselves indebted to us in the end. Whatever has been learned has become common property, since we have been unable to patent our experience."

The tires most largely in use by the Electric Vehicle Co. weigh about 30 pounds each, there being four to a set. Mr. Condict thinks that on streets paved wholly with asphalt solid tires may prove successful; also, that solid tires will be used upon electric or compressed air trucks.

\* \* \*

TO THE EDITOR OF THE INDIA RUBBER WORLD: In reply to your letter of inquiry, I would say that my thoughts on the future of the horseless vehicle, or automobile, are few but broad.

I regard the coming into use of the automobile a thing as certain as the coming of to-morrow, and that they will become as practical and successful as our auto-street car, in some form. What form the power which is to prove the winner will take; whether electricity, hydrocarbon (liquid or gaseous), compressed air, liquefied gas, or a combination, no man can foretell. It is my opinion, however, that each kind will have its own particular field of usefulness, depending upon some circumstance; for instance, what can be cleaner and neater, in every respect, than the electric-driven vehicle? But what use is an electric vehicle on a soft muddy road? None, because of its necessary weight. Its sphere is in the well paved city or suburb.

The factor of most importance in connection with the development of the automobile is, unquestionably, the character of our roads. A carriage which is perfectly satisfactory in France, where roads are well-nigh perfect, may be a failure in this country, if the attempt is made to do the touring, which could be done in France. To illustrate: a small vehicle made there, and wonderfully successful was racked to pieces in a few months, by ordinary use about this city.

Probably the next important factor, in the development of the automobile, is the road that you carry with you on the rim of the wheel—the India-rubber tire in some form or other. That made the bicycle popular, and will make the carriage so, to a lesser degree. In the first place, a good tire renders a lighter construction possible, all other things being equal, because of the lessening of shocks. Then, too, it does away with the noise so noticeable in the horse propelled carriage, and so much more annoying in the heavier, and naturally more noisy automobile.

With such drains on the supply of rubber as are sure to come with this increased demand for it, and in such large amounts as any form of automobile will demand, it seems to me that there is no more necessary industry in sight, than the development of the India-rubber forests, and that as soon as possible.

HENRY SOUTHER.

[THE writer of the above is consulting engineer, in charge of tests for the Pope Manufacturing Co.]

\* \* \*

TO THE EDITOR OF THE INDIA RUBBER WORLD: It is difficult for us to give you accurate data such as you require. Our sales are rapidly increasing, and the indications are that the coming season will amount to several hundred vehicles, all of

which are equipped with rubber tires. Our preference is decidedly in favor of solid rubber tires, which contain a larger amount of rubber than the pneumatic tires.

There is another part of our equipment, requiring hard rubber, and that is the containing cells of our storage battery equipment. We predict that this industry will create a larger demand for rubber than any other industry that has been established up to this time.

AMERICAN ELECTRIC VEHICLE COMPANY,  
C. E. CORRIGAN, General Manager.

Chicago, Ill., January 16, 1899.

\* \* \*

TO THE EDITOR OF THE INDIA RUBBER WORLD: Replying to your favor of the 14th, we shall be large makers of automobiles, and therefore large users of rubber for that purpose.

Any attempt at prophesying quantities is unjustified. The interest will be a large one, and, like all other new interests, will be largely overdone by incompetent people who are in no way fitted to take the task.

No automobile will be successful in the hands of the people that is not practical and thoroughly automatic in its regulation. This will throw out the great majority. Yours very truly,

A. H. OVERMAN,  
President [Overman Wheel Co.].

Chicopee Falls, Mass., January 16, 1899.

\* \* \*

AN authority on automobiles—a mechanical engineer of wide practice, who has been consulted professionally by several manufacturers, and has done some designing—expresses the opinion, for THE INDIA RUBBER WORLD, that 1899 will witness the introduction of the new vehicles on a very large scale. He inclines to the belief that pneumatic tires will be used widely for passenger vehicles, together with cushion tires with 100 pounds air pressure. For heavy vehicles he thinks that the ultimate form of tire will be a flat belt of rubber, for the reason that this will wear better than the pointed tire now in use on carriages. He suggests that Mr. Richard Croker, who is so influential in New York politics, has been included in the great company organized to use horseless trucks on the streets of this city, in order that his influence may be availed of in extending the use of asphalt on the streets.

Another mechanical engineer suggests that the tendency of all rubber tires to creep, and the expense of keeping tires in repair, will lead to the use of tires of sectional rubber for automobiles. Their advantage is that in case of injury to a single section it might be replaced with little trouble or expense, leaving the rest of the tire in place for further service.

#### THE BEST TIRES FOR AUTOMOBILES.

A VERY enthusiastic view as to the future of electric vehicles is taken by Mr. C. E. Wood, in a paper read recently before the Chicago Electrical Association, based upon facts which have been apparent also in New York city. One feature of his paper will be of special interest to the rubber trade. He called attention to the very great difference in the amount of power consumed in the use of different rubber tires. He tried a new tire on the cab and it consumed 18 per cent. more power than the ones he had been regularly using. He has determined by careful tests that the solid rubber tire is far preferable to the pneumatic tire for use on electric vehicles, without any reference to first cost, durability, or freedom from puncture. The pneumatic tire absorbs more energy by about 20 per cent. when inflated, and by a very considerable increase when it becomes deflated to different points of pressure.

#### THE ADVANCE IN RUBBER SUNDRIES.

FROM "THE AMERICAN DRUGGIST" (NEW YORK).

PRICES on druggists' rubber sundries have advanced markedly within the past year, and several of the articles of this kind handled by retail druggists have experienced three or four fluctuations towards a higher level in as many days. The cause of this has been a source of some mystery as well as tribulation of spirit to many of our readers who have scented the trail of the trust octopus in this hardening of values, and the jobbers in druggists' rubber sundries have been accused of all sorts of oppressive tactics.

The true explanation of the advances is to be found first in the increased cost of importation of crude rubber and second in the agreement arrived at among manufacturers to correct the ruinous competition which had practically demoralized the druggists' rubber sundries business.

In conformity with the plans agreed upon at the conference of manufacturers of druggists' rubber sundries which took place in this city early last year, the manufacturers have been able to perfect a strong combination, and the prices on a number of the rubber goods sold by retailers are now controlled on terms which seem to absolutely prohibit cutting at the sources of supply. The time was formerly when jobbers in druggists' rubber sundries could obtain such articles as breast-pump bulbs, hot water bottles, finger cots, rubber bands, etc., at almost any figure from manufacturers, cutting among them being so prevalent, and many being so ready to listen to the tales of cutting among rival manufacturers that were brought to them by the same jobbers. We know of one instance where a manufacturer had been induced to sell articles at a loss of 4 cents per gross on the cost of manufacture before the desire to protect their interests led makers to form an agreement for the maintenance of prices on some parity with cost of manufacture.

The existence of the agreement precludes, of course, any possibility on the part of rival jobbers of obtaining individual advantages over other jobbers, and they have been compelled to advance prices to the retailers, with the result that a general howl has gone up and, as we have said, the jobbers have been accused of belonging to all sorts of wicked trusts and combinations, when in fact the jobbers are helpless in the matter.

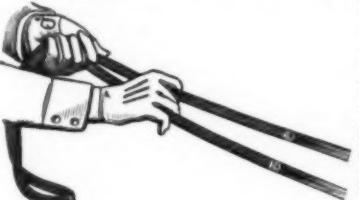
It has been a matter of common knowledge among rubber men for several years past that rubber has been sold at a price low out of all proportion to the cost of importation. The manufacturers of rubber plasters were among the first to recognize this and they agreed among themselves a little over two years ago to take steps to overcome the ruinous competition which then existed. This competition, coupled with the increasing cost of crude rubber, had almost demoralized the rubber plaster industry. The price of crude rubber had advanced over 25 per cent. while the price of plasters had been cut in all directions. Considerations of self-preservation then were sufficient to bring the rival manufacturers together to form some mutual agreement regarding prices, and this was effected without any pool or trust in the popular meaning of these terms.

The manufacturers of druggists' rubber sundries have effected a similar agreement among themselves, and judging from the accounts we hear it is working very satisfactorily. While it seems that no one jobber now has any advantage over another in the matter of prices, this does not imply that competition has ceased. Competition has simply been diverted in another direction, and quality now rules where low prices formerly held sway. The change is one which we think will be welcomed by the retail druggist who places quality above cost.

## SOME NEW RUBBER GOODS.

## RUBBER HAND HOLDS FOR REINS.

**B**UCKINGHAM'S patent non-slipping hand holds for riding and driving reins are made of rubber, to be drawn over the leather reins, to enable a positive and certain grip to be maintained without the tiresome straining of the fingers. A special advantage is that they prevent slipping in wet weather. They are made in varying widths, to suit every class of reins, and can be fitted by a saddler or harness maker in an hour or less. A thin paste is first applied to the leather, to aid in keeping the holds firmly in place. These holds



are referred to as being more attractive in appearance than the hand loops in use heretofore. They come from England and are marketed in this country by C. M. Moseman & Brother, Nos. 126-128 Chambers street, New York.

## THE SCOTT-ROGERS DETACHABLE TIRES.

THIS is a double tube tire, in the outer casing of which is imbedded, on each side, a diagonally woven metallic band, automatically contractable. These bands become rigid by inflation and are intended to make the tire clinch to the crescent or any other rim. Some of the advantages claimed are that there is no rim splitting, the tire goes on and off easily, it does not creep or roll off, it covers the spoke ends, and fully encloses the tube. The inventor of this tire—C. S. Scott—writes to THE INDIA RUBBER WORLD that in the beginning he was an advocate of single tube tires until he became impressed with the idea that in tires of this type the material used to retain the air is "stuck fast to the inside, where you can neither get at it, fix it, remove, or replace it." Furthermore, "a single fibre of fabric, extending through the rubber of the air chamber, would cause a slow leak."

From that time Mr. Scott decided in favor of the double tube construction. But the double tubes then on the market all seemed open to objections. They were wood



rim splitters, or they required to be cemented on, or they were not easy to handle, or they made trouble if not fitted accurately, or they would creep. Some were objectionable on account of not being circularly collapsible, while wires were liable to become bent in shipping. It was with a view to overcoming these objections that the experiments were made which have resulted in the tire here illustrated. The inventor of the tire, in his letter to us, says "that the idea and principle were forced upon him by dint of failure and not by reason of success. In other words, it was found that the woven wire tape failed to do what was originally intended, but it did develop a quality which is really the most interesting feature of the tire. The woven wire was

found placed in the belly of the tire in such a way that the lateral strain would cause it to shorten circumferentially and thus clinch it to the rim, but it was found that any extensible material—whether wire spring, hard vulcanized rubber, or any other substance—would tend to creep if placed below the edges of the rim, but a most important discovery came to pass that we have not fully understood to this day, to wit: that if the same material is placed further out, so that it lies above and outside the rim, the tire would crawl backwards, or rather creep in the opposite direction. This fact applies to some extent to inextensible bands above the rim edge. A conclusion from the above facts naturally presented itself in connection with our tape. . . . By placing the tape partially above and partially below the rim edge, these elements fatal in themselves singly, are counteracting in their dual action. Thus the creep being overcome, it only remained for the spreading and shortening of the tape to complete the efficiency of the device." Manufactured by The Scott-Rogers Co., Cadiz, Ohio.

## THE STRAUS GRIP PROTECTOR.

AMONG the numerous bicycle specialties marketed by the Straus Tire Co. (No. 127 Duane street, New York) is the device shown in the accompanying illustration. Its use is to protect not only the grip, but also the bicycle as a whole. In case of a wheel falling to the ground, it generally strikes the end of the grip, marring or breaking that part, besides which the liability always exists that the bicycle as a whole will suffer injury. The illustration will indicate sufficiently the use which is made of rubber in this connection.



## MILWAUKEE PUNCTURE-PROOF TIRES.

THIS is a single tube pneumatic bicycle tire, in the manufacture of which a new feature has been introduced, with a view to lessening the tendency to puncture. The puncture proof material used is referred to as being applied to the fabric in the tread of the tire in

such a way as not to detract from the resiliency of the tire—any possible stiffness thus contributed to the tread being offset by the elasticity of the sidewalls. In forming the tire, the tread is built up of five layers of fabric, between which are interposed three thin layers of carbondum, while the side walls are made only of the usual thickness of fabric and the inner and outer walls of rubber. The weight of the tire does not exceed that of ordinary tires. These tires have been in use long enough to be tested fully, and an extensive list of testimonials from users of them is



supplied by the company. The trade is supplied by the Milwaukee Patent Puncture Proof Tire Co., No. 436 Jefferson street, Milwaukee, Wis., who have been incorporated with \$40,000 capital.

#### THE "RUBBER NECK" BICYCLE SADDLE.

THE special feature of this saddle is the honeycomb rubber cushion. The vertical rubber tubes forming the honeycomb

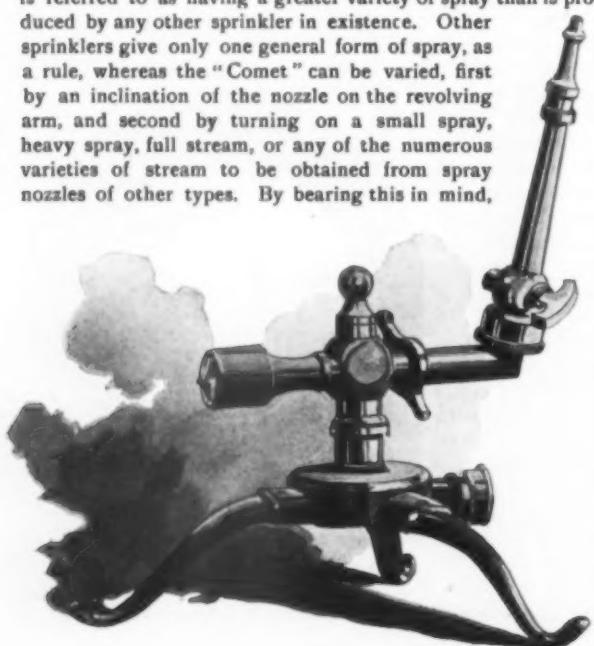
yield to every motion and conform automatically to the form of the rider, while the air spaces or cells extending from the plate to the cover throughout its area serve to keep the saddle cool and thoroughly ventilated.

RACING SADDLE.

One of the accompanying illustrations shows the patented rubber cushion as located between the cloth lined steel plate and the leather cover. The lines of this saddle have also received careful attention, the saddle tops curving gently toward the center, with a view to holding the rider on and preventing him from slipping off. There is a soft nose in front, to add to comfort in riding. This line of saddles is referred to as being protected by some twenty-five United States patents. Manufactured by The Bunker Saddle Co., Nos. 63-71 Milwaukee avenue, Chicago.

#### THE "COMET" LAWN SPRINKLER.

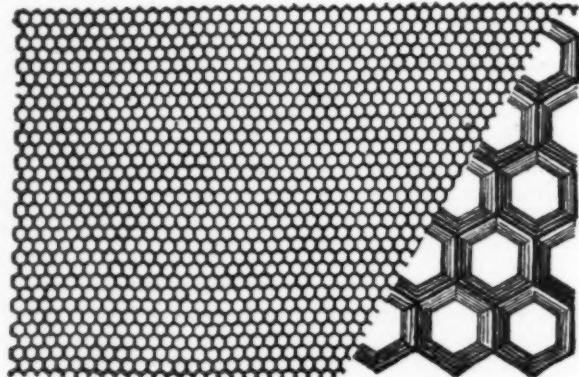
WHILE not wholly new, this is one of the newer lawn sprinklers which is being handled in the rubber hose trade. It is referred to as having a greater variety of spray than is produced by any other sprinkler in existence. Other sprinklers give only one general form of spray, as a rule, whereas the "Comet" can be varied, first by an inclination of the nozzle on the revolving arm, and second by turning on a small spray, heavy spray, full stream, or any of the numerous varieties of stream to be obtained from spray nozzles of other types. By bearing this in mind,



and giving the "Comet" a little time and attention, a variety of effects may be obtained that is both curious and pleasing. The "Comet" is sold without the nozzle, it being assumed that every household possesses one. The trade is supplied by W. D. Allen & Co., No. 151 Lake street, Chicago, Ill., who are large dealers in goods of this class. Some other types were described last month.

#### COMBINATION DENTURES.

THIS cut shows the full size of a metal plate, designed to reduce the weight of the rubber necessary to be used in dental plates, without lessening their strength. Part of the illustration, on the right, shows the perforations as they appear under a strong magnifier. The holes are countersunk, so that the



rubber forced through them forms a head or clinch on the face of the plate, rendering it impossible to detach them by any ordinary force. These metal plates are referred to as readily taking the form of the cast, which reduces to a minimum the trouble in fitting. The invention is that of Dr. R. Wünsche, of Germany. Plates are made of either aluminum or "victoria metal." Made by the S. S. White Dental Manufacturing Co., Philadelphia.

#### THE E. & D. CUSHION HEEL.

THE principal claim made for this heel is that the peculiar form of corrugations involved in its design prevents slipping and at the same time will not carry dirt. The manufacturers have been led to get up this heel for the reason that some others in the market have been open to objection on one or both of the above counts. In applying this device, two or three leather lifts are first removed from the heel of the shoe, and the remainder of the heel trimmed to fit. Both the leather surface and the inner side of the cushion heel are roughened, in order to facilitate cementing. Finally, the rubber is attached, with the help of nails, the heads of which are set down to the washers. Made by the E. & D. Manufacturing Co., No. 148 Perkins street, Somerville, Mass.



## BRIEF ABSTRACTS OF RECENT RUBBER PATENTS.

**A**MONG recent patents issued by the United States patent office, embodying applications of India-rubber or Gutta-percha to a greater or lesser extent, have been the following. It is not practicable here to do more than to note the use of rubber sufficiently to enable those who may feel interested to decide whether or not to look into any particular patent more fully:

## TIRES.

No. 616,484.—Pneumatic Tire. Thomas B. Jeffery, Chicago.

In combination with a wheel rim which has a peripheral recess to afford a seat for the tire, a tire which is rifted at its inner circumference and provided with lateral beads or flanges to engage the rim; a flap wing or flange which is united to the tire at or near one edge of the rift and adapted to extend therefrom over the entire width of the recess in the rim such flap wing or flange being reduced in stiffness at a line remote from its free edge.

No. 616,630.—Pneumatic Tire. Fred W. Morgan, Chicago.

A hollow or pneumatic tire comprising an annular, tubular flexible pneumatic tire casing containing a removable inflatable inner air tube closed at its ends and having its end portions lapping within the casing, the latter being provided at intervals along its base side with oblong stay-plates embedded or incorporated in the casing and having slots of a width to permit the passage of the inner tube or portions thereof, the casing being slotted longitudinally along lines between the longitudinal edges of the slots in the stay-plates, and being normally closed at such points by flexible portions extending between the lines of the slits and the longitudinal edges of the stay-plates.

No. 615,922.—Vehicle Tire. Kenneth D. Sutherland and Thomas W. Mitchell, Montreal, Canada, assignors of one-third to William H. Sutherland, same place.

A non-inflatable tire, comprising an inner tube consisting of a metallic spiral coil on which the convolutions are spaced apart, and inner and outer tubular layers or piles secured to the inner and outer surfaces of the coil, and also secured together in the intervals between the convolutions of the coil and a separate exterior jacket or casing inclosing and snugly fitting the inner tube and consisting of a transversely folded layer, provided at its edges with eyelets and lacing rove through the eyelets and projecting beyond the exterior surface of the jacket or casing contiguous to the joint, to present a roughened surface for contact with the seat in vehicle rim.

No. 616,121.—Armored Pneumatic Tire for Bicycles. Patrick Lenihan, New York city.

An improved elastic pneumatic tire consisting of a tube forming the air-chamber and provided with an armor plate inserted or embedded within the tread portion, the armor plate having at its respective end edges longitudinal beads forming rounded retaining heads, the tube being interiorly provided with ridges or enlarged portions at opposite sides projecting into the air-chamber and arranged immediately with relation to the tread and base portions and extending in a longitudinal direction at a point above the terminal rounded beaded heads of the armor plate, grooves or recesses being formed in the ridges or enlarged portions.

No. 616,459.—Compound for Closing Punctures in Pneumatic Tires. Jean Gaa, Basle, Switzerland.

A composition of matter for automatically repairing pneumatic tires, consisting of an emulsion formed of ten parts of pulverized ammoniac gum, ten parts of powdered gum and twenty parts of water suspended in twenty parts of glycerine.

No. 616,463.—Wheel for Vehicles. John A. Heany, Philadelphia.

In a wheel for vehicles, the combination of a hub, spokes, inner rim, felly, elastic rubber bands secured between the felly and rim, screw threaded loops and nuts.

No. 616,516. Pneumatic Tire. John T. Wilson, Jersey Shore, Pa.

A pneumatic tire having a plurality of "floating" diaphragms which divide the space on the inside of the tube into a plurality of compartments, the width of each diaphragm being greater than that part of the interior circumference of the tube extending between the points of attachment of the edges of the diaphragm; and means for introducing air under pressure into each compartment; the diaphragm adjacent the tread normally occupying a position close to but not in contact with the inner surface of the tube of the tire, the diaphragm being never under tension,

No. 616,572.—Cement Injector for Repairing Pneumatic Tires. William Herrick, Chicago, assignor to the Morgan & Wright, same place.

A cement injector for use in repairing pneumatic tires, comprising a suitable cup or holder for containing the cement and a plunger or similar device for ejecting the cement therefrom; the cup or holder being provided with a tapered or pointed discharge nozzle having a longitudinal bore which terminates in two or more lateral discharge openings whereby the nozzle may be readily inserted through a puncture and the cement deposited at each side thereof and the discharge nozzle being externally threaded, whereby the operator will be compelled to manipulate the injector in a way that will insure an effective repair.

No. 616,574.—Pneumatic Tire. Karl G. Hiller, Zittau, Germany.

In a pneumatic tire, the combination of a protecting cover of hardly extensible tissue or other suitable material arranged between the air tube and the outer covering and formed of several portions, the ends of which overlap each other and are capable of sliding the one upon the other to uncover the air tube.

No. 616,574.—Tire. Jacob C. H. Bagger, Cordesville, S. C.

In a tire, the combination with an outer resilient casing and a rim, of a substantially U-shaped spring, composed of a plurality of coils or bends extending in parallel relation to each other, the end portions of the spring being arranged in planes outside of the side edges of the rim, and metal stays connecting the coils of the spring for maintaining the proper relative positions thereof.

No. 616,833.—Cushion-Tire for Vehicle-Wheels. Frank P. Fagan and Emil P. Stoebler, Peoria, Ill.

The combination with a wheel rim having a flat metal tire, a rubber tire removably clamped to the rim through an intermediate support for retaining the tire, and which support is removably clamped to the rim of the wheel, serrated clamping edges projecting in opposite directions from the flexible band adapted for clamping the same to the rim of the wheel and for holding the tire in the band and from lateral movement therein a clamping device in the tire consisting of a rod or band and of the means of tightening the band for clamping the same rigidly to the flexible rim and wheel.

## BOOTS AND SHOES.

No. 616,112.—Ventilated Boot or Shoe. John E. Kennedy, Montreal, Canada.

In combination in a shoe having a collapsible centre sole, an air passage in communication therewith, an insole having a movable heel-tap, the flap being slitted horizontally to form an

upper and lower portion, the lower portion having an opening therein and an inelastic piece fitted to the opening.

No. 616,113.—Lasting Apparatus for Rubber Footwear. John E. Kennedy, Montreal, Canada.

An apparatus for the purpose described, comprising the last body, the outer sole plate, central sole-plate having a channel formed between them, holes in the centre plate, means for securing the plates to the sole of the last, and means for imparting heat separately to each plate as and for purpose specified.

No. 616,170.—Rubber-Soled Leather Shoe. John E. Kennedy, Montreal, Canada.

A shoe comprising an upper, a layer or sole secured to the upper and entirely covering the under side of the upper, a rubber impregnated inner sole secured to the under face of the layer or sole; fastening means for connecting the layer or sole and the middle sole, the fastening means being independent of the layer-securing means, and a rubber outer sole secured to the middle sole by vulcanization.

#### MECHANICAL.

No. 615,747.—Pneumatic Horse-Collar. Joel E. Richardson, Salem, N. H.

A pneumatic horse-collar, comprising in its construction the metallic shell provided with projections on each edge and a series of perforations near the edge between the projections, the pneumatic pad, the covering provided with two rows of eyeleted holes, the holes of one row being opposite the spaces between the holes of the other row whereby the covering may be fastened to the shell by rivets, cord or wire passed through the perforations of the shell and through the holes of one row in the covering and further secured by means of the projections of the shell and the holes of the other row in the covering.

No. 615,832.—Tile Flooring. John J. Fields, Jr., New York city.

As a new article of manufacture a female tile of yielding material provided with dovetail and straight grooves at its edges and adapted to receive corresponding ribs of male tiles.

#### DRUGGISTS' SUNDRIES.

No. 615,850.—Brush. Christopher M. Kelly and Orrin J. Linendoll, Grand Rapids, Mich., assignors to the Phoenix Industrial Co., same place.

The combination in a fountain-brush of a detachable head, a handle having grooved forks formed at one end to embrace the brush back, the ends of the forks turned in to clasp over the end of the head, a tube passing through the handle and perforated at one end to receive water from a water-bulb and at the other end to spray water into the bristles of the brush and a water bulb connected therewith.

#### COMPOUNDS.

No. 615,863.—Process of Producing Rubber Substitutes and Compositions of Matter Thereof. William K. Leonard, Piqua, Ohio.

The process of producing a rubber substitute by mixing corn-oil, sulphur and paraffin, in the proportions substantially of seventy-six per cent. of corn-oil, twenty-one per cent. of sulphur, and three per cent. of paraffin, subjecting the mass to heat until the oil is vulcanized or the process of vulcanization begins, then shutting off the heat and allowing the process of vulcanization to continue until complete and the mass to cool.

No. 615,864.—Process of Producing Rubber Substitutes and Compositions of Matter Thereof. William K. Leonard, Piqua, Ohio.

A composition of matter for a rubber substitute, consisting of corn-oil, castor-oil, chloride of sulphur, naphtha and oxide of magnesia.

#### CLOTHING.

No. 615,319.—Waterproof Fabric. John H. Stevens, Newark, N. J., assignor to the Celluloid Co., New York.

A fabric waterproof by a pyroxylin compound which contains pyroxylin, oil, camphor and naphthol.

#### DENTAL RUBBER.

No. 615,405.—Dental Plate. John S. Naudler, McKeesport, Pa.

A base for a dental plate consisting of sheets of wire gauze

swaged together and interlocked with rubber, the meshes of said gauze being partially or wholly exposed.

#### MISCELLANEOUS.

No. 616,016.—Rubber-Cement Tank. Simon Ross, Cincinnati, Ohio.

The combination of a frame provided with journal bearings, a liquid receptacle having a spout projection terminating in an upturned mouth, the receptacle provided with trunnions seated in the bearings and a combined sealing and locking device hermetically closing the mouth of the receptacle when in raised position.

No. 616,109.—Tool for Repairing Elastic Tubing. Clarence E. Kelly and Amanda J. Haworth, Greentown, Ind.

In a tool for preparing elastic tubing, the combination of a shaft, an awl secured to one end of the shaft, a handle removably fitted over the awl, a needle having an open ended slot in its pointed end, and a sleeve slidably supported on the shaft and provided with a series of radiating pins.

No. 616,273.—Water-Motor. Joseph A. Walker, Kansas City, Mo.

In a water-motor, comprising side floats having an intermediate sluice, the combination with power conveying wheels at each end of the floats extending within the sluice of a flexible cable extending over the respective power conveying wheels the cable having a core composed of convoluted sheets of rubber.

No. 616,430.—Life-Preserver. George B. Shepherd, Grayson, Ky.

In a life-preserver, the combination of a flexible waterproof casing provided with legs, a series of loops arranged at intervals at the body portion of the casing above the legs, and a series of folding braces connecting the hoops and adapted to space the same apart and lock them in such position, whereby the body portion of the casing is rendered rigid and prevented from collapsing.

No. 616,685.—Weather Strip. Daniel W. Bosley, Chicago, Ill.

A weather strip consisting of a cushion portion of rubber or similar material folded longitudinally with its edges secured together by chain and over stitching so as to securely hold it and act as a protecting locking edge, and a metallic frame portion having one of its lateral edges folded over so as to embrace the over stitched locking edge of the cushion.

#### TRADE MARKS.

No. 32,236.—Cementitious or Adhesive Substances and Puncture-Closers. Fabriques de Produits Chimiques de Thann et de Mulhouse, Thann, Germany. Filed Oct. 27, 1898.

The word "Hermetine," used since September 22, 1898.

No. 31,248.—Golf-Balls. The Whitman & Barnes Manufacturing Co., Akron, Ohio. Filed November 5, 1898.

The word "Diamond," used since September 1, 1898.

No. 32,351.—Pneumatic Tires and Fastening Devices Therefor. The Dunlop Pneumatic Tyre Co., Limited, London, England. Filed October 10, 1898.

The word "Triflex," used since July, 1898.

No. 32,352.—Pneumatic Tires and Fastening Devices Therefor. The Dunlop Pneumatic Tyre Co., Limited, London, England. Filed October 10, 1898.

The word "Multiflex," used since July, 1898.

#### DESIGNS.

No. 29,825.—Hoof-Pad. Edward D. Flint, Oakland, Cal. Filed November 11, 1897. Serial No. 696,180. Term of patent fourteen years.

The design for a hoof-pad.

No. 29,857.—Rubber Sole. Frank W. Whitcher, Boston, assignor to himself, Sanford Crandon, Melrose and Herbert L. Turner, Malden, Mass. Filed November 16, 1898. Serial No. 696,651. Term of patent fourteen years.

The design for a rubber sole for boots and shoes.

No. 29,880.—Water-Bag. Charles E. Longden, New Haven, Conn., assignor to the Seamless Rubber Co., same place. Filed May 23, 1898. Serial No. 691,515. Term of patent fourteen years.

The design for a water bag.

## DEATHS IN THE RUBBER TRADE.

## WHEELER CABLE.

**W**HEELER CABLE, president of the Cable Rubber Co. (Boston), died at his home in Jamaica Plain, January 14, at the age of sixty years. He had been for more than a year a severe sufferer from Bright's disease, but his recuperative powers had been so wonderful, and he had rallied so often, that even with a year's warning death came as a severe shock to his friends and relatives. The rubber trade of Boston, feeling deeply their loss, held a meeting Monday, January 16, at the office of the Boston Belting Co., some twenty firms being represented. The following resolutions were passed:

WHEREAS, Death has removed from our midst our honored friend and business associate, Wheeler Cable, we, the undersigned, members of the rubber and allied trades, in token of our keen sense of bereavement, offer the following resolutions:

*Resolved*, That the death of Wheeler Cable is a severe loss to each of us personally and to the trade at large. His long experience in the rubber business, his strict integrity, his genial whole souled generosity, made him ever the friend of what was right. We shall miss his wise counsel and his honest sympathetic presence. A man of modest ambitions and conservative spirit, the impress of his rare old fashioned virtues will remain always with us, a silent but eloquent tribute to his worth, and to our deep appreciation of him as a man and a friend.

*Resolved*, That a copy of these resolutions be sent to his family.

It was also voted to close the offices and stores of the rubber trade throughout Boston from 2 to 3 o'clock that day, the hour of the funeral. The trade as a whole sent a magnificent cross of roses and a sheaf of wheat crossed by palms and embedded in violets. The companies represented at the meeting were:

Boston Belting Co., by Mr. James Bennett Forsyth.  
 Revere Rubber Co., by Mr. W. H. Gleason.  
 George A. Alden & Co., by Mr. R. B. Baird.  
 C. J. Bailey & Co., by Mr. C. J. Bailey.  
 American Rubber Co., by Mr. George P. Eustis.  
 National India Rubber Co., by Mr. W. L. Gaylord.  
 Stoughton Rubber Co., by Mr. W. F. McClintock.  
 Tyre Rubber Co., by Mr. F. H. Jones.  
 S. Klous & Co., by Mr. G. W. Linscott.  
 Fuller, Leonard & Small, by Mr. W. N. Shelton.  
 Boston Woven Hose and Rubber Co., by Mr. W. F. Robinson.  
 James Freeman Brown Co., by Mr. E. D. Hewins.  
 Reimers & Meyer, by Mr. C. H. Arnold.  
 Globe Rubber Works, by Mr. W. S. Knowles.  
 Norfolk Rubber Co., by Mr. T. E. Eustis.  
 Goodyear Rubber House, by Mr. R. Josselyn.  
 Boston Rubber Shoe Co., by Mr. Fred T. Ryder.  
 Hood Rubber Co., by Mr. George H. Hood.

THE INDIA RUBBER WORLD, by Mr. H. C. Pearson.  
 Philadelphia Rubber Works, by Mr. J. H. Stedman.

The funeral services were held at the house of the deceased in Jamaica Plain, and were conducted by the Rev. Ellis Mendell. The pall bearers were:

Hon. L. D. Apsley, of the Apsley Rubber Co., Hudson, Mass.  
 Mr. George F. Hodgman, of the Hodgman Rubber Co., New York.  
 Mr. Henry C. Pearson, of THE INDIA RUBBER WORLD, New York.  
 Mr. C. J. Bailey, of C. J. Bailey & Co., Boston.  
 Mr. Frank F. Silliman, of the Cable Rubber Co.  
 Mr. Benj. F. Taft, Jr., of the Rubber Manufacturers' Mutual Insurance Co.

The room wherein the body was laid was massed with beautiful flowers, elegant pieces being sent by the employés of the

Cable Rubber Co., and by friends and relatives from many parts of New England. The interment took place at Forest Hills Cemetery, one of the most beautiful spots in the vicinity of Boston.

As a detailed sketch of Mr. Cable's business career has already appeared in THE INDIA RUBBER WORLD [November 10, 1894], it will not be necessary to do more than to allude to the salient points in it. He was born in Warren, Conn., attended the old-fashioned district school, and began his apprenticeship in the rubber business in 1850 under the pioneer rubber man, John W. Graechen. At the age of sixteen he was a full fledged calender man. In 1865 he became one of the superintendents of the National India Rubber Co., at Bristol, R. I., and five years later became superintendent of the Ætna Rubber Mills, at Jamaica Plain. In 1881 he formed the Cable Rubber Co., of which he was president, in the manufacturing end of which he was the unquestioned head until his last illness. He was one of the organizers and for many years one of the directors in the Manufacturers' Mutual Insurance Co.

(Boston), and held the friendship and genuine respect of all the strong men in that organization. Personally Mr. Cable was an old-fashioned philosopher, whose common sense found its ideal in writings of the Josh Billings type. Indeed, he often quoted that genuine American as having uttered more wise and pungent truths than any other writer. In a quiet way Mr. Cable did much expert work in the rubber trade and invented processes and machines, many of which are in successful use to-day. The loss of this pioneer in the rubber trade is most severely felt. As expressions of sympathy come in from all parts one marvels at the number of men who knew him and is stirred by the universal and genuine tributes to his sterling worth and honesty.



## EDWIN R. RAND.

AT a meeting of the rubber trade of Boston, held at the office of the Boston Belting Co., January 16, 1899, the following resolutions were passed :

WHEREAS, Our friend and business associate, Edwin R. Rand, has been removed from our midst by death, we, representing the rubber trade of Boston, offer the following resolutions :

*Resolved*, That the trade as a whole, and each of us individually, feel that in the death of Mr. Edwin R. Rand we have sustained a great loss. He was a man upright in all of his business transactions, ever the soul of courtesy and honor, and of a rarely lovable nature. While we shall miss him sorely, we are full of gratitude that we knew him and had a share in his generous, whole-souled friendship.

*Resolved*, That a copy of these resolutions be sent to his family.

Mr. E. R. Rand, who was well known in the mechanical rubber goods circles, died very suddenly at his home in Newton, Mass., January 11, of peritonitis. He was born in Boston fifty-four years ago and began his business career with George Dunbar & Co., jobbers of railroad supplies, as agent for the Boston Car Spring Co. (Roxbury, Mass.) In 1884 he left Dunbar and, associating himself with T. C. Lothrop, treasurer of the Car



Spring Co., began work as a salesman. Within one year he was elected general manager of the company and was exceedingly successful in building up a large business for it in mechanical rubber goods and heavy clothing. In 1888 he started the Newton Rubber Co., building a plant at Newton Upper Falls, Mass. He lost control of this in 1894, and in 1896 started the Rand-Wayne Co., but through illness and on account of the business panic he was unable to finance it successfully. In spite of the fact that he was not a factory man, Mr. Rand was really quite an expert in rubber manufacture. As a salesman he was wonderfully successful, holding the friendship of his trade, and was a man who in an apparently leisurely manner was able to secure the largest sort of orders. He was possessed of the most perfect tact and courtesy and had a wonderful faculty for making friends and keeping them. He leaves a widow, but no children. The interment took place at Mount Auburn.

## GEORGE A. FULLER.

GEORGE ALONZO FULLER, president of the Mechanical Fabric Co., died January 18 at his home in Providence, R. I. He was born at Leicester, Mass., on November 7, 1827, and grew

up in the card clothing business, in which he was interested in an important way until his death. He was president of the American Card Clothing Co., vice president of the Narragansett Mutual Fire Insurance Co., and took a live interest in public affairs. He left one child—the wife of Mr. A. L. Kelley, treasurer of the Mechanical Fabric Co.

## DR. EUGENE OBACH.

EUGENE F. A. OBACH, PH. D., F. I. C., F. C. S., M. I. E. E., chief of the experimental department in the important cable works of Siemens Brothers & Co., Limited (London), died last month in Austria, whither he had gone in the hope of regaining his health. Dr. Obach was born at Stuttgart, April 26, 1852, and was educated in the polytechnic school there and the university at Leipzig. Graduating in 1875, he entered the firm of Siemens & Halske (Berlin), as assistant to Dr. Werner Siemens. In the next year he went to Woolwich, England, where he afterwards resided. He made important inventions in the electrical field, assisted in the laying of more than one Atlantic cable, and delivered several lectures which have been published, including the "Cantor" series on Gutta percha. The latter were abstracted in a series of articles in THE INDIA RUBBER WORLD, and referred to in our pages as "constituting the most thorough and comprehensive work yet published on the subject of Gutta-percha, and one destined to serve for many years to come as a standard."

## GOOD PROSPECTS FOR CUBAN TRADE.

EXPORTERS and others in New York having business relations with Cuba and Porto Rico are looking forward to a substantial revival of trade in that direction, as American control of the islands becomes more definite. Notwithstanding the devastations of war, the soil and the mines are as rich as ever, and the sugar, tobacco, and ores produced from them in as great demand. Hence capital can always be commanded for development of those rich resources whenever a stable government is assured. The new tariff schedule which went into effect in Cuba on January 1 is more favorable to imports from the United States than the rates formerly charged, on which account an immediate increase in our export trade is expected. Indeed, from the cessation of hostilities orders began to reach New York, for goods to be shipped as soon as a new tariff should be adopted. On December 20 THE INDIA RUBBER WORLD was advised that one export house in this city had in hand 2200 orders for goods awaiting shipment under the reduced rates of duty, the difference in some cases amounting to 62½ per cent. A new start will have to be made, all around. Even where old plantation property has not been destroyed, machinery and appliances—including rubber goods—will have to be renewed, since the careless habits of the people have been such that practically nothing goes over from one season to another in condition for use. The buying of goods must be limited, however, until new crops of cane can be grown, almost none having been cultivated of late. These points are suggested by Mr. J. A. Dennis, of the American Supply Manufacturing Co. (New York), who makes a specialty of the export trade in rubber goods.

PERCHOID GOLF BALLS.—A patent has been issued in Great Britain to Charles J. Grist, patentee of "perchoid," or "oxylin," as it is called in Europe, for the application of this material to the manufacture of golf balls. There is added to the oxidized oil product, "Gutta-percha from 5 per cent. to 50 per cent., as desired, or wax or other suitable substance adapted to impart to the material greater cohesion and consequent tenacity, adding rosin in some cases, if desired."

## THE CRUDE RUBBER RECORD BROKEN AGAIN.

THE crude rubber movement, so far as the United States is concerned, again shows a larger volume than in any preceding year. The imports into the United States were larger than ever before, the reexports were comparatively small, and stocks at the close of the year were exceptionally light. In consequence the deliveries to consumers exceeded those of 1897 by 1255 tons (including those for Canadian consumption). The figures used for these comparisons are derived from the annual statistical summary prepared by Albert T. Morse & Co., India-rubber brokers.

These statistics do not include Gutta-percha, Balata, or the cheaper East Indian gums—all of which are taken into account in the India-rubber statistics published by the government, and by some private statisticians as well. The English or "long" ton, of 2240 pounds, is used here, whereas the metrical ton of 1000 kilograms contains only 2204.6 pounds. In the report referred to, this comparative statement is given of the prices of fine Pará rubber, in New York and Liverpool:

YEAR.	New York Prices.		Liverpool Prices.		
	s.	d.	s.	d.	
In 1883.....	95	@ 1 15	4	8 @3 10½	
In 1884.....	48	@ 98	4	0 @2 0	
In 1885.....	54	@ 65	2	3 @2 8	
In 1886.....	60	@ 83	2	6 @3 6	
In 1887.....	83½@	68½	3	6 @2 11½	
In 1888.....	67	@ 78	2	10 @3 3	
In 1889.....	60	@ 73	2	7 @3 1	
In 1890.....	66	@ 100	2	10½@4 1	
In 1891.....	60	@ 95	2	5 @3 7½	
In 1892.....	62½@	74	2	8 @2 11	
In 1893.....	64	@ 79	2	10 @3 3	
In 1894.....	64½@	73	2	9 @3 1	
In 1895.....	70	@ 81½	3	0½@3 4½	
In 1896.....	71	@ 85	3	0½@3 8½	
In 1897.....	79½@	89	3	5 @3 9	
In 1898.....	82 @ 1 06		3	7½@4 5	

The next table analyses the imports of crude rubber into the United States by grades, the figures denoting tons. The most interesting feature is the evidence shown of the increasing imports of African grades:

YEARS.	Fine Pará.	Coarse Pará.	*Cen- tral.	African & B. I.	Total.
1893.....	7,444	2,916	2,370	3,690	16,420
1894.....	6,839	2,614	2,309	2,881	14,643
1895.....	7,121	2,767	2,307	3,987	16,182
1896.....	6,515	2,706	1,807	3,305	14,333
1897.....	7,556	2,935	2,404	4,776	17,671
1898.....	6,804	2,935	3,003	5,878	18,620

[\* Including Caucho.]

In the next table, based upon the foregoing, is shown the relative percentage of different grades of rubber in the whole imports into the United States:

YEARS.	Fine Pará.	African.	All other.
In 1893 .....	45½	22½	32½
In 1894 .....	46¾	19	34¼
In 1895 .....	44	24½	31½
In 1896 .....	45½	23	31½
In 1897 .....	42¾	27	30¾
In 1898 .....	36½	31½	32

Approximate average .....

43½ 24½ 32

The figures in the table which follows, showing the extent of the world's visible supplies of rubber on January 1, 1899, have been derived from the Messrs. Morse's tables, though they are given on this page in pounds instead of tons, in order that they may be compared readily with former tables:

	Pounds.
Stocks in the United States .....	1,323,840
Pará grades .....	651,840
Central American and Caucho .....	112,000
African and East Indian .....	560,000
Stocks in Europe .....	5,398,400
Pará grades .....	2,161,600
All other .....	3,236,800
Stocks Pará grades at Pará and afloat .....	3,483,200
Total .....	10,215,440
Total, January 1, 1898 .....	9,920,960
Total, January 1, 1897 .....	10,673,600
Total, January 1, 1896 .....	10,108,000

[This includes stocks afloat of all other than Pará grades.]

## A SCHOOL FOR SELLING RUBBER BOOTS.

EVERY year when the thirty or more salesmen of the Mishawaka Wool Boot Co. are assembled to get their instructions for another campaign, a very interesting evolution is gone through with. They are gathered in a large room, with the heads of departments and the factory managers, and one salesman is selected to represent a customer to whom another salesman brings the Mishawaka boot and tries to effect a sale. Spurred by the presence of the others, the men are often brilliant, and whether they are or not all the qualities of the goods are discussed, the attitude of the buyers illustrated, and the listeners so primed with fact, suggestion, and ambition that they go out on the road so well equipped that failure is impossible.

## CONSUMPTION OF INDIA-RUBBER BY THE UNITED STATES AND CANADA (IN TONS).

[From the Annual Statistical Summary of ALBERT T. MORSE & Co., New York.]

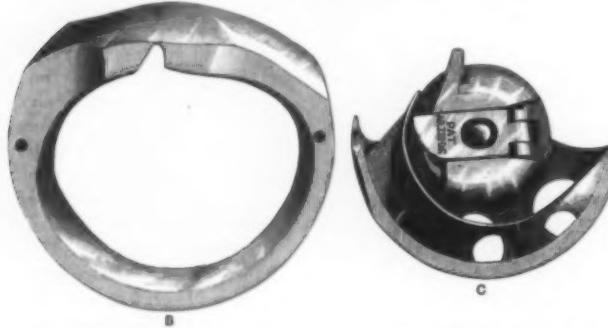
DETAILS.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Imports to United States.....	10,777	9,654	10,742	11,103	13,103	13,033	13,554	12,942	14,263	16,152	15,347	16,420	14,643	16,182	14,333	17,671	18,620
Exports to Liverpool and Continent.....	279	473	261	147	116	201	268	116	231	982	491	714	391	324	500	260	150
Add Stocks on January 1.....	10,498	9,181	10,481	10,956	12,987	12,832	13,286	12,826	14,032	15,170	14,856	15,706	14,252	15,858	13,833	17,421	18,470
Less Stocks close of year.....	328	954	1,224	1,338	1,285	1,700	1,673	1,612	745	1,260	1,087	1,217	1,037	1,421	558	641	707
Deliveries to Manufacturers .....	10,826	10,135	11,705	12,294	14,272	14,532	14,959	14,438	14,777	16,430	15,943	16,923	15,289	17,279	14,391	18,062	19,177
Imports to United States.....	954	1,224	1,388	1,285	1,700	1,673	1,612	745	1,260	1,087	1,217	1,037	1,421	558	641	707	567
Exports to Liverpool and Continent.....	9,872	8,911	10,367	11,009	12,572	12,859	13,347	13,693	13,517	15,343	14,726	15,886	13,868	16,721	13,750	17,355	18,610

## MACHINE FOR MACKINTOSH SEWING.

THE sewing of rubber-coated fabrics, single or double texture, is a problem that has vexed the soul of many a factory superintendent. If the goods have been cured either by solarization or by heat, the work is easier, but even then the machine must be built especially for that work. For sewing green or unvulcanized coatings many makes of machines—in-



deed, nearly all—are totally unfitted. The rubber follows the needle, works into the shuttle, and so effectively gums things up that in a very short time it is impossible to work. To obviate this a sectional shuttle race, which is here illustrated, has been designed. Briefly described, *A* is the race, with two simple locking bars that can be operated without trouble or loss of



time. *B* is the locking ring, and *C* the shuttle and bobbin case having a hinged flap on its handle. To remove the shuttle the locking bars are pressed down and locking ring, shuttle, and bobbin case with bobbin are taken out with one motion. The replacement is just as simple and as quick. The machine to which this attachment belongs is known as No. 31-16 and is manufactured by the Singer Manufacturing Co., New York.

## A CHANCE FOR CAPITAL AND ENERGY.

IT may surprise the rubber trade to know that during the year 1898, 500 tons of fossil flour were used in rubber compounding. It may not be generally known, but fossil flour, or infusorial earth, is mined and refined at Bass River, Nova Scotia, where is located the only complete plant for it in the world and where there are the largest and purest deposits of the material itself. The plant consists of a large mill 194 x 80 feet, equipped with boilers, engines, and special machinery, a large storehouse, boarding house for fifty men, cottage for the

superintendents and better class mechanics, machine and blacksmith shop, a pole railway eleven miles long, equipped with box cars and locomotive, a fine wharf and storehouse at the water front, with trolley loaders, a storehouse in Portland, Me., that will hold a thousand tons—all in first class condition, the whole plant being but three years old. The outfit is owned by a millionaire wool man in Providence, R. I., who is about to start on a three years' visit to Europe. To this end he has sold his wool business, and is rapidly closing up every line of business in which he has been engaged so that he will have perfect freedom from all commercial cares. The history of the fossil flour company has been so much a part of the rubber trade during the last three years, that this statement of the position of the business has seemed proper at this time.

## NEW RATES OF DUTY IN PORTO RICO.

THE new Porto Rican tariff has been promulgated from Washington, to go into effect on February 1. There are no special rates for imports from the United States. All trade between this country and Porto Rico is restricted to American vessels. Duties must be paid in American money or in foreign gold coin. Duties on rubber goods are charged on gross weights (including packages), with a specified allowance for tare. The items of chief interest to the rubber trade are :

Caoutchouc and Gutta-percha, manufactured in any shape or into any kind of article not specially mentioned, 5 cents per kilogram ; tare, 20 per cent.

Rubber toys, 10 cents per kilogram ; tare, 25 per cent.

Waterproof and Caoutchouc stuffs [all articles coated with Caoutchouc on one or both surfaces, as well as those with an interior lining of Caoutchouc are included] :

a On cotton tissue, 25 cents per kilogram ; tare, 10 per cent.

b On woolen or silk tissue, 50 cents per kilogram ; tare, 10 per cent.

## THE "MARVEL" WHIRLING SPRAY SYRINGE.

THIS syringe is claimed to be the only real improvement in vaginal syringes made in twenty years. It is simple, convenient, and effective. It dilates and flushes the passage with a volume of whirling fluid which comes in contact with the entire surface, dissolving, and removing all secretions and discharges. The highly polished rubber "vag"



pipe is five inches long. The whirling spray tip may be easily removed for cleansing. The syringe is fitted with an adjustable soft rubber guard which prevents the injection from escaping, and also causes its immediate return by suction into the bulb when pressure is removed. A soft rubber nozzle cap placed over the spray tip prevents the syringe from leaking when it is carried filled for use when travelling. Manufactured by Eugene Pearl, No. 23 Union square, New York.

THE INDIA RUBBER WORLD will publish shortly an interesting article from a South American correspondent on the threatened decline in the production of Cauchoo.

## NEWS OF THE RUBBER TRADE.

THE prosperity of a mechanical rubber business is often to be gaged by the steady growth of a manufacturing plant. In the office of the Manhattan Rubber Manufacturing Co. (New York) hangs a wash drawing, showing their factories with all the additions up to date. Viewed by the side of their original plant, the growth is phenomenal, and they are so busy to-day that still further enlargement is called for.

=The study of the Editor of *THE INDIA RUBBER WORLD* has recently been beautified by five finely executed photographs of the works of the Farrel Foundry and Machine Co. (Ansonia, Conn.). These photographs represent an exterior view, showing the works as a whole, and four interiors—the great foundry department, the magnificent chilled roll department, and two views of the great machine shops.

=And now the whiting men have formed a trust, known as the American Whiting and Putty Co., with offices at No. 101 Beekman street, New York, and the trade have been notified that the trust, in filling orders, will ship from the plant nearest to that of the rubber manufacturers ordering.

=Morris & Co. (Yardville, N. J.) have for years past made a specialty of ducks and drills for the rubber trade. To-day they probably know as much regarding the wants of the rubber men in their line, and, what is more important, how to produce perfect goods at a reasonable price, as any concern in the line of cotton weaving.

=If imitation is really the sincerest form of flattery, American rubber manufacturers ought to feel pretty well over the handsome light-weight rubber shoe manufactured by the North British Rubber Co., Limited (Edinburgh), and named the "Yankee."

=Prescott Bros. (Cornhill, Boston) are billing large orders for garden hose and fixtures, and are enthusiastic over the outlook for a great garden hose season for 1899.

=The Johnson Rubber Co. (Brooklyn) lately filled a \$10,000 order for their vulcanite pump valves for the Peninsular and Oriental Steamship Co. It will be remembered that this concern were the patentees of the Bone-Black Compound and for years have produced a very high grade of hard rubber valve.

=The Mechanical Fabric Co. (Providence, R. I.), in sending out their New Year's announcements, call attention to the fact that they are the original manufacturers of pneumatic tires in the United States. They also give a few pertinent facts about their "Conqueror," "Emperor," and "Flexifort" tires.

=Chapman & McLean, who have taken over the Butler Works (Butler, N. J.), are building up quite a trade in mechanical rubber goods and soft rubber specialties.

=The Pearl corset shield has been purchased from the inventor, Eugene Pearl, by the Mattson Rubber Co. (New York). Mr. Pearl, by the way, has invented a new syringe, a detailed description of which may be found soon in our department of "Some new Rubber Goods."

=The Indiana Rubber and Insulated Wire Co. (Jonesboro, Ind.) have just completed a 60×120 three-story brick addition to their factory. The third floor will be used for drying rubber and the other floors and basement for storage and compound rooms. The factory has also been equipped throughout with a hot air blowing system for heating, the work being done by the National Blower Co. (Milwaukee, Wis.). During the coming month they expect to install an electric light plant.

=The B. F. Goodrich Co. (Akron, Ohio) have organized a very practical bit of philanthropy in their works by fitting up a light, airy lunch room for their help and supplying them with tea or coffee gratis.

=The firm of Otto G. Mayer & Co., which consisted of a co-partnership between Otto G. Mayer and the late William Jex, having expired by limitation on December 31, 1898, a new firm was organized on January 3, under the same firm name, the partners being Otto G. Mayer and Lewis Engelhorn, the new copartnership assuming all the obligations of the late firm. Henry D. Lohmann, who for many years has been connected with Mr. Mayer, will sign the firm name by procription.

=The Newton Rubber Works (Newton Upper Falls, Mass.) seem to be right in it on can rings this year, having placed some very large orders at prices that proved most interesting to the trade.

=The Metal Last and Tree Co. (Boston) are making aluminum lasts for arctics, their experiments in aluminum trees for rubber boots having been most successful. In one factory a number of pairs of their trees have been in use for over two years, showing no signs of wear, while two sets of wooden trees have been worked in the same heats and on the same work with them.

=Jimmy Horn, president of the "Pegleg Club" of Reading, Pa., who is said to be the inventor of a noiseless rubber leg, was one of the individuals upon whom the mayor of the city descended recently in his attempt to break up the organization above referred to.

=The Empire Machine and Foundry Co. (New Brunswick, N. J.), who have made an enviable reputation as manufacturers of molds for the rubber trade, have sold their entire business to the Vacuum Refrigerating Co., who will continue to serve the rubber trade.

=Mr. W. H. Adams, for some time New England agent for the Eureka Fire Hose Co., has withdrawn from that position and has been succeeded by Mr. Francis L. Ide, who was formerly located at Syracuse, N. Y., and handled the territory of which that place is the center. Mr. Ide has opened an office in the John Hancock Building, Boston, from which place all of the New England business will be handled.

=The United States Kommod Co. is the name of a concern who are manufacturing what appears to be the lowest priced good substitute that has yet been produced. They make two brands, the "Delta" and the "Snowflake." Further information can be obtained at their office, No. 98 Water street, New York.

=The date of the annual meeting of the New York Rubber Co. this year fell upon January 31, at which time *THE INDIA RUBBER WORLD* was going to press.

=With naphtha 4½ cents a gallon higher, and with benzole a little lower, it looks as if the latter solvent might soon become more popular with the rubber trade.

=The Millay Last Co. (Hudson, Mass.), in which the Hon. L. D. Apsley is the moving spirit and largest owner, has just completed its equipment of latest automatic machinery and is supplying many of the leading rubber shoe companies the country over with lasts.

=Julius Kahn, who travels for the New York Belting and Packing Co., Limited, was a recent visitor to New England, where he booked some very satisfactory orders.

=William R. Thropp (Trenton, N. J.) lately made some molds for a New England concern, who are good judges of such work and also close figurers. They were so delighted with the texture of the metal that they started out to find who did the casting, with the intention of getting it done for themselves and finishing the molds in their own factory. Their progress in that endeavor was blocked when they learned that Thropp made his own castings for that special work and the result is that he still makes their molds.

=The Gulline Pneumatic Collar Co. (Granby, Quebec) for two years past have been at work on a pneumatic horse collar. It is reported that they have succeeded in producing a marvelously complete article, which will soon be placed upon the market.

=The present management of the Columbia Rubber Co. (Boston) having agreed to retire, the business will be continued by the employés at No. 145 South street, under the same name. The retiring management will remain at that address for the purpose of liquidating its accounts.

=As a substitute for oxide of zinc, Lithophone seems to have made a great record for itself abroad, particularly in English and German rubber factories, where thousands of tons of it are used annually. Chemically it is a pure sulphide of zinc combined with a little sulphate of baryta, and is a pure white impalpable powder that does not discolor by heat nor sulphur fumes. The New York house of Roessler & Hasslacher, No. 100 William street, are already furnishing many mills in this country with this pigment.

=Coupons due January 1, on the first mortgage gold bonds of the Mechanical Rubber Co. were payable on presentation at the office of the Knickerbocker Trust Co., No. 66 Broadway, New York. Coupons due on the same date on the 6 per cent. mortgage debenture bonds of the New York Belting and Packing Co., Limited, were payable at the same place.

=The annual meeting of the stockholders of the Eureka Fire Hose Co. will be held on Monday, February 6, at the office of the Company, No. 13 Barclay street, New York. Polls open 12 to 1 P. M.

=There was a fire at the factory of the Empire Rubber Manufacturing Co. (Trenton, N. J.) on January 7. Its origin was unknown, but fortunately the fire department succeeded in keeping the loss down to \$500.

=J. Ambor, Hamburg, Germany, who for a number of years was with Persicana & Co., marketers of American rubber goods, has opened an agency for the sale of technical and electro-chemical supplies. With Mr. Ambor's long and varied experience, American rubber specialties in this line should find a profitable outlet through him.

=Mr. H. F. Hering, who so successfully represented the Boston Woven Hose and Rubber Co., in New York, the middle states, and the south, has accepted a position with Chapman & McLean (New York and Butler, N. J.) and will have the general sale of the mechanical and soft rubber goods manufactured by this company.

=The Metropolitan Rubber Co. have removed their New York office from No. 676 Broadway to No. 35 Howard street, first door from Broadway, on the east.

=C. S. Knowles (No. 7 Arch street, Boston) has opened a New York office at No. 120 Broadway, in charge of W. O. Turner.

=If the title of general manager of a company ever belonged to any man, that title belongs to Charles L. Johnson, of the United States Rubber Co. He certainly does the work and does it well, which after all is a greater satisfaction to the thinking man than can be embodied in any phrase, however decorative.

=Close on the heels of the announcement of the formation of the Whiting Trust comes the incorporation of what will be known as the Boston Whiting Co., and from a shrewd buyer in the rubber trade the information that, within a month, his own wants would be fully supplied by a new company that is already beginning to manufacture whiting not far from New York.

=The India Rubber Co. (Akron, Ohio) have entered into a contract for the manufacture and sale in this country of the Graham detachable tire—a Canadian tire described in THE INDIA RUBBER WORLD for January 1.

=Captain R. A. Kincaid, proprietor of the Denver Rubber Co. (Denver, Col.), says that he has been engaged for many years in supplying the people of Colorado and the adjacent states with rubber goods of all kinds, and he now regards the outlook for business in this line brighter than at any time in the past.

=Frank W. Greene, broker in crude rubber (New York), whose offices were destroyed in the Home Life Insurance building fire, is now established in the adjoining building, No. 253 Broadway.

=The 1899 calendar of the United States Rubber Co. met with a great demand. For awhile Mr. John P. Lyons, advertising manager for the company, received more than 500 letters per day, containing requests for it.

=The Hartford Rubber Works Co. have established a branch store at Detroit, Mich.

=The three Stokes brothers, whose ability and energy have made such a success of the Home Rubber Co. (Trenton, N. J.), are doing the same sort of work for the Joseph Stokes Rubber Co. and the progress that these energetic, practical men make in lifting a new enterprise along is an object lesson for those who dislike to pay the price of success.

=Chester J. Pike, selling agent of the United States Rubber Co., is a busy man these days, either at the Boston or New York offices, or at some one of the factories whose goods he handles. Unless all signs fail he is preparing for a most aggressive campaign during the coming shoe year.

=C. J. Bailey's "Won't Slip" tire has been exhibited this year in the Boston, New York, and Chicago cycle shows and has everywhere received much attention. The same type of tire is now being tested on horseless carriages; its non-slipping quality being of great advantage in securing absolute control of the movements of these vehicles.

=The La Crosse Rubber Mills Co. (La Crosse, Wis.) have added a new building to their plant, which is an eloquent comment on the growth of their business. They are equipping the new building with Standard sewing machines.

=George Watkinson & Co. (Philadelphia) have added another building to their plant, this being the third addition since the factory was erected, two years ago.

=The annual meeting of stockholders of the Mechanical Rubber Co. will be held at the office of Thomas M. Moore, Esq., Passaic, N. J., on Wednesday, February 8, at 1.45 P. M., for the purpose of electing directors of the company for the ensuing year and the transaction of such other business as may properly come before the meeting.

=The Straus Tire Co. (No. 127 Duane street, New York) have been appointed eastern representatives of the Goodyear Tire and Rubber Co., for the sale of their entire products in New York, Pennsylvania, New Jersey, and the New England states. The western business, by the way, will be in the hands of several well known jobbers. The company's products embrace bicycle and carriage tires, inner tubes, tire tape, and a number of specialties, including Mr. Strauss' "Snap-on" pedal rubbers, described in THE INDIA RUBBER WORLD for January.

=At the annual meeting of the B. F. Goodrich Co. (Akron, Ohio), on January 11, the officers were reelected, as follows: George T. Perkins, president; H. C. Corson and George W. Crouse, vice presidents; R. P. Marvin, secretary; W. A. Folger, treasurer; F. H. Mason, general manager.

=The Monarch Rubber Co. (St. Louis, Mo.) have filed a statement of an increase of their capital stock from \$50,000 to \$75,000.

=The B. F. Goodrich & Co. (Akron, Ohio), as creditors, have applied for the appointment of a receiver of the Humber Co., America (Westboro, Mass.) Several attachments have been issued against the company, and Ernest Terah Hooley is reported to have brought suit against Elliott Burris, formerly manager of the company, to recover commissions alleged to be due for work in promoting Humber interests in England.

=The Hohmann & Maurer Manufacturing Co. (Rochester, N. Y., and No. 85 Chambers street, New York) have obtained a perpetual injunction against Charles J. Tagliabue (No. 53 Fulton street, New York) and others, to prevent the use of any designating mark or brand upon thermometers or kindred goods, upon which the letters "H. & M." are conspicuously displayed. This company's goods have been on the market and known for years as the "H. & M." thermometers. This designating term, so readily applied by the trade, was some years ago incorporated into a trademark and has ever since been the distinguishing mark for their goods.

=Representatives of practically all the insulated wire manufacturers in the country met in Chicago on January 9, at the office of the electrical bureau of the National Board of Fire Underwriters, to discuss standards of thickness of insulation. There has been great lack of uniformity in such matters, and it is understood that a satisfactory conclusion was reached.

#### REMOVAL OF THE HARVARD RUBBER CO.

THE Harvard Rubber Co. (Boston) have transferred their mackintosh manufacture from Stoughton to Milford, Mass., where they have leased a factory building for five years. They will operate at their new location fifty additional sewing machines. They have also become equipped for coating their own cloth, putting in the latest spreaders, grinders, washers, doubler, and other machinery required for a first class proofing plant. The company advise THE INDIA RUBBER WORLD that their principal office will remain at No. 725 Washington street, Boston, but that they will also open an office in New York city. It is understood that they will be prepared to do proofing in excess of their own demands, and have made contracts for such work already.

#### A RUBBER SHOE FACTORY BURNED.

THE factory of the Toronto Rubber Shoe Manufacturing Co., Limited (Toronto), at Port Dalhousie, Ont., was destroyed by fire on January 2. That was a holiday, but for some time the company had been so pushed with work that they shut down only on Sundays. The buildings and contents were practically a total loss, nothing being saved except the books, the last models, and 171 cases of manufactured goods which were ready for shipment to the Toronto warehouse, where, fortunately, the company had quite a large stock, sufficient for all ordinary requirements until they can start running again. Thus the fire will practically cause no interruption to their business. The total amount of insurance on building and contents was \$85,000, and the loss, roughly speaking, \$125,000 or \$130,000, but not enough, it is stated, to affect the financial standing of the company. The mills and calenders will be of little value except for scrap iron, as nearly every roll is cracked. THE INDIA RUBBER WORLD is advised that the company will put up a modern

building, with sprinklers, and equipped with the latest improved machinery and for a largely increased output.

#### THE SCOTT-ROGERS TIRES.

THE Scott-Rogers Co. (Cadiz, Ohio), incorporated under Ohio laws last November, with \$10,000 capital, to make pneumatic vehicle and bicycle tires, advise THE INDIA RUBBER WORLD that they have a small plant "which they intend to use only for the limited manufacture of a new grade of the very highest quality tires. These tires will be sold direct to those riders who are willing to pay the highest price for the best article. The H. A. Lozier Manufacturing Co. (Cleveland, Ohio) have taken out a license to manufacture these tires, and are having them made in large quantities by the B. F. Goodrich Co. (Akron, Ohio)."

#### AN AMERICAN DUNLOP TIRE SUIT.

ON January 7 an attachment was levied, in Belleville, N. J., against the property of the Dunlop Pneumatic Tyre Co., Limited, an English corporation, in a suit brought by R. Lindsay Coleman, president of the Western Wheel Works (Chicago). This attachment does not close the factory of the American Dunlop Tire Co., but restrains that company from transferring certain of its capital stock pending litigation, or from transferring to England any funds that may be due to the foreign corporation. Mr. Coleman alleges breach of a contract to sell to him the American rights of the Dunlop tire, his suit being instigated by the appearance of reports that these rights had been sold to a Toronto concern to be known as "The Dunlop Tire Co. of Canada." Mr. Kirk Brown, manager of the American company, being absent in Europe, the gentlemen in charge at Belleville did not wish to discuss the matter for THE INDIA RUBBER WORLD. A circular has been issued, however, stating: "So far as we are concerned, the effect of this suit is merely that we shall pay to either the plaintiff or to the defendant [the English corporation] whatever we may have, owing to the latter. During the six years of our existence we have made a practice of discounting our bills, and are prepared to continue to do so."

#### RUBBER SHOE PRICES.

IN spite of the fact that certain officials in the United States Rubber Co. have stated that there will be a reduction in the price of shoes, with the beginning of the new shoe year, it does not seem at all likely. Rubber is higher and cotton is higher. Furthermore, a circular has gone out to investors, which, while not claiming to be authoritative, or in any way connected with anybody in the United States Rubber Co., yet its statements are accepted with a certain amount of confidence by rubber manufacturers, in which the statement is definitely made that there will be a 5 per cent. advance on the price of the goods.

#### NEW INCORPORATIONS.

THE C. Roberts Rubber Co., under New Jersey laws; capital, \$150,000. They advise THE INDIA RUBBER WORLD that this "is the name which has been taken by the old firm of Christopher Roberts & Co., of Newark, N. J. It will be a close corporation, and no change is to be made in the running of the business or in the line of goods made. The officers of the new concern are Christopher Roberts, president; Eberhard Faber, vice president; and Weldon Roberts, secretary and treasurer." They are engaged largely in the manufacture of erasers and elastic bands.

=Chicago Waterproof Cloth Co., under laws of Illinois; capital, \$50,000. Incorporators: George W. Winslow, S. Allen Wilson, Franklin M. McClure.

=The Watertown Rubber Co. (Watertown, Mass.) under laws of West Virginia; authorized capital, \$200,000. Incorporators:

H. N. Wayne, E. Dizabean, Newton, Mass.; G. M. Goddard, A. W. Crossley, Boston; L. P. Destribotz, Watertown, Mass.

=Hallanan Humane Rubber Pad and Horseshoe Co., under New Jersey laws; capital, \$250,000. David Bonner is president, and Colonel Lawrence Kip, David S. Hammond, Cornelius Fellowes, and other New York horsemen are members of the directorate. The New York offices are at No. 35 Nassau street. The company takes the name from M. Hallanan, a practical horseshoer in New York, who several years ago patented a rubber horseshoe pad which was described in THE INDIA RUBBER WORLD March 10, 1895.

=The E. & D. Manufacturing Co. (Somerville, Mass.), under Maine laws; capital, \$5000, with \$625 paid in. President: William J. Emerson, Somerville, Mass.; treasurer, Arthur I. Davis, Medford, Mass. Will manufacture rubber goods, including rubber shoe heels.

=The Non-Puncturable Tire Co. (Rochester, N. Y.), under New York laws; capital, \$50,000. Directors: N. M. Ferguson, K. P. Shedd, E. A. Hinsdale, James S. Tripp, H. D. Shedd, Rochester; A. D. Ellis, East Syracuse.

=The Automatic Tire Inflator Co., under Maine laws; capital, \$50,000, nothing paid in. William Howard Paine, president; M. Elizabeth Paine, treasurer—both of Providence, R. I.

=The Detroit Rubber Tire Co., under Michigan laws; capital, \$6000. Incorporators: George W. Barnes, Viora Edwards, Minnie E. Edwards, with 200 shares each.

#### COLONEL DODGE'S TIRE SUIT.

ON December 21, in the United States circuit court at Boston, final argument was filed in the case of Theodore A. Dodge *v.* F. H. Porter *et al.* [the Reading Tire Manufacturing Co.], based upon an alleged infringement of the Tillingsast tire patent—No. 497,971, granted May 23, 1893. A newspaper publication on January 21 announcing a decision in favor of Colonel Dodge, appears to have been premature.

#### THE MANAGEMENT OF THE CABLE RUBBER CO.

WHEN the head of a firm is removed by death, the question always arises as to the future conduct of its business. That will doubtless be so in the case of the Cable Rubber Co. (Boston), the death of whose founder is chronicled on another page. In no way did the Senior Cable show his wisdom more plainly than by the manner in which he selected those who could carry the business on if he were not present. The factory, which is under the charge of Mr. Samuel H. Cable, has old and skilled foremen, trained in every detail of the work. The buying and selling, all of which are done from the Boston end, have long been in the hands of Mr. William J. Cable, present secretary of the company. For the past year the Senior Cable not only took no active part in this administration, but for much of the time was actually too ill to be consulted even on matters of moment. It is only fair to the younger men, who now have the management of the business, to say that the result of last year's business is the best in the history of the company, which argues a bright commercial future for the concern.

#### DECISION IN A BANIGAN SUIT.

THE Woonsocket Rubber Co. will have to defend the suit brought against them by the late Joseph Banigan, to recover \$100,000 on a promissory note. When this note fell due, on August 3, 1896, the Woonsocket company declined to pay, on the ground that Mr. Banigan was indebted to the company in a larger sum, from which they requested him to deduct the amount of their note. Mr. Banigan refused to do this, and, on August 6, 1896, began this action. The Woonsocket company filed an answer on October 13, 1896, pleading in set off a part

of their claim against Mr. Banigan. Meanwhile—on August 8, 1896—the company began a suit against Mr. Banigan for the amount alleged to be due them. The substance of a decision handed down in the appellate court at Providence on January 11 is that the defendant cannot avail itself of a set off, so long at least as it keeps on the docket its suit against the plaintiff, based in part on the same claims set up in the plea of set off.

#### AMERICAN MADE SUBMARINE CABLES.

THE Safety Insulated Wire and Cable Co. (No. 229 West Twenty-eighth street, New York), recently received an order for 130 miles of submarine cable, and 6 miles of shore line cable, for shipment to the Philippine islands. An order for 30 miles was also placed with W. R. Brixey (No. 203 Broadway, New York). These cables were purchased by the signal office of the United States war department, the awards being given to the lowest bidders who were also able to give quickest delivery.

#### PERSONAL MENTION.

MR. ROBERT D. EVANS was reported recently to have bought a lot 32×130 feet, at the southeast corner of Fifth avenue and East Seventy-third street, New York, with a view to building a residence. The terms of sale were not made public. Mr. Evans is spending the winter at Thomasville, Ga.

=The Hon. L. D. Apsley, president of the Apsley Rubber Co. (Hudson, Mass.), is at Hot Springs, Ark., where he is recovering from an attack of the grip.

=Mr. John Knott, European agent for the Boston Rubber Shoe Co., has been spending a month in the United States. He makes no secret of the fact that he is delighted with his reception here and goes back with a most cordial appreciation of Yankee rubber men and rubber goods.

=Messrs. James Bennett Forsyth, general manager, and Thomas Forsyth, superintendent, of the Boston Belting Co., have been severe sufferers from the grip, but are now recovering.

=Mr. George A. Alden was recently elected president of the board of directors of the Shoe and Leather National Bank, one of the strongest financial institutions in Boston.

=Mr. M. S. Lawrence, of Boston, G. J. Bailey's right hand man, has been ill at home for some three weeks, but is again at his place at the Boylston street store.

=Mr. W. N. Lockwood, treasurer of the Davidson Rubber Co. (Boston), is absent on a four months' trip to Europe for his health.

="Advertising Rubber Goods" is the title of a readable article printed lately in *Printers' Ink*, and devoted to the methods employed by Mr. John P. Lyons, manager of the advertising department of the United States Rubber Co. The article is a good one, but it does not half do justice to Mr. Lyons, for it says nothing about his ready wit, his talent for versifying, or his genius for turning off four men's work each day of his life.

=Mr. George F. Virtue, of the Clifton Manufacturing Company (Boston), has been quite ill at his home in Ashmont for some weeks with a gastric trouble. He is, however, recovering rapidly, and will soon resume his accustomed duties at the Clifton.

=Mr. Charles E. Tingley, whom the rubber shoe trade know so well in connection with the Standard Rivet Co. (Boston), and who is acknowledged to be an active, unimaginative, business man, recently broke down completely with what appeared to be nervous prostration. Ordinary treatments did him no good and he finally took, with a great deal of scepticism, a few treatments in osteopathy and was speedily helped. This, by the way, is not an advertisement for that form of medical treat-

ment, nor even a suggestion that it will help others, but a plain every day statement of fact.

=Mr. Arthur W. Stedman, of George A. Alden & Co. (Boston), has gone to South Carolina for three weeks' shooting. No man in rubber importing circles has a record as a constant and successful worker that will go ahead of Mr. Stedman's. While he has such a magnificent physique that he shows no signs of being fatigued, he is very wise in taking this mid-winter vacation.

=Mr. George H. Hood, who has always been accounted one of the well men of the rubber trade, was a very severe sufferer from the grip this winter, but we are pleased to say that he is on the road to rapid and complete recovery.

=Mr. Samuel N. Williams, treasurer of the Lycoming Rubber Co. (Williamsport, Pa.), is a candidate for mayor in his town.

=The Editor of THE INDIA RUBBER WORLD takes pleasure in acknowledging an invitation to the dinner of the wholesale shoe merchants of Chicago, held at the Grand Pacific Hotel on January 24. It was with the deepest regret that he was obliged to deny himself the pleasure of attending.

=Mr. Samuel K. Wilson, proprietor of the Globe Rubber Works, Trenton, N. J., was a recent visitor to Boston, his errand being in part to arrange a settlement with the heirs of Henry S. Knowles. Mr. Wilson, when questioned regarding the mechanical trust, said that he knew nothing at all about it and that the newspaper reports were chiefly wrong.

=Mr. H. F. Hering, who is so well known and popular in the mechanical goods trade in and about New York, has considerable artistic ability. This was shown by his creating a really beautiful female figure of sand on a beach not far from New York last summer. So well was it done that people came for miles around to see it.

=Two rubber men who are connected with the city government of Trenton have been photographed in their official capacities and THE INDIA RUBBER WORLD thanks a friend in Trenton for supplying it with copies. One of these is a very good likeness of Mayor Welling G. Sickel, of the United Rubber Co., and the other of City Clerk C. Edward Murray, of the Crescent Belting and Packing Co.

=A characteristic story is told of Mr. A. C. Cattelle, well known to the rubber trade in Cincinnati. It seems a number of years ago, before he was as prosperous as he is at present, he learned that the Trenton Rubber Co. wanted a stenographer, and, although he knew nothing of that art, he applied for the position. Mr. Magowan, who was then in charge, partly in fun, told him that he would give him a month to learn the business. The young man accepted the challenge, hired a room in Trenton, spent from ten to sixteen hours a day in learning, and was able to take the position and do satisfactory work at the end of that time.

=The whole rubber trade deeply sympathizes with Mr. Walter S. Ballou, treasurer of the Joseph Banigan Rubber Co., in the deaths of his father and mother which occurred recently, one surviving the other only a few days. A beautiful trait in Mr. Ballou's character was the filial respect and love that characterized his frequent references to his aged parents, and the constant attention and care that he gave them during their declining years.

#### A SOLID TIRE PATENT DECISION.

**A** RECENT decision by Judge Thomas in the United States district court, in Brooklyn, sustains patent No. 554,675 issued February 16, 1896, to A. W. Grant, for improvements in rubber tires. The court holds that this combination of features,

viz., steel flange with flaring insides, rubber with narrowed base, pointed top, with angle and two wires, below top of rim, with fabric on the base, etc., although every one of those features had been formerly used in rubber tires, was still patentable because all of those features had not been formerly used in any one particular tire.

It is claimed by the defendants that the decision will have little or no effect upon the trade, as by the combination the scope of the patent is so limited, that it is a very simple matter to avoid it. In a combination patent such as this is, the omission of any one of the elements which go to make up the essential features, avoids it, as the patent can only be upheld, where all the features are used together. They say that the decision is valuable, however, because it sets at rest various claims that have been made, and clears the road for rubber manufacturers to enter the field and make tires which have become so popular and numerous. The patent is avoided by making the inner portion of the sides at right angles to the base, or by using a flat band instead of two wires, or by locating the wires or the angle above the rim, or by having no angle at all.

The suit was between Rubber Tire Wheel Co. (Springfield, Ohio), the assignees of the patent, and the American Rubber Tire Co. (New York), who say that the decision in no way affects the industry, and that there is no occasion for appealing, though they may do so for moral effect.

#### LOWENTHAL & MORGANSTERN AGAIN IN THE RUBBER BUSINESS.

**I**T will be remembered that from '82 to '95 the firm of Lowenthal & Morganstern was prominent in the business of rubber reclaiming and had customers all over the world, and owned and operated a large plant in Jersey City. In the last named year they sold this plant to the New Jersey Car Spring & Rubber Co., Mr. Lowenthal devoting himself to other large business interests and Mr. Morganstern retiring from business and taking up his residence in Europe. Quite recently Mr. Lowenthal, like all who have ever been in the rubber business, began to long again to be in it. The result was that he purchased the Jersey City plant that he and his partner so successfully ran, and the old firm name having been kept up, is again a manufacturer of reclaimed rubber. The announcement on the front cover of this issue, the familiar picture of the plant, and, above all, the familiar firm name, merit a warm welcome from the trade.

#### THE EDITOR'S BOOK TABLE.

OUTLINES OF INDUSTRIAL CHEMISTRY. A TEXT BOOK FOR STUDENTS. By Frank Hall Thorp, PH. D., Instructor in Industrial Chemistry in the Massachusetts Institute of Technology, New York: The Macmillan Co. 1898. [Cloth, \$vo. xx+541 pp. Price \$3.50.]

**T**HE object of this book is to furnish an elementary course in industrial chemistry, which may serve as the ground work for a more extended course, if desired, by students assumed to be familiar already with the elements of general chemistry. For others into whose hands the book may fall, the necessarily brief limits of its pages, when the amount of space devoted to any given subject is considered, are amplified by the full lists of references to books wherein fuller details are to be found. Such a list follows the few pages devoted to Caoutchouc and Gutta-percha, though it must be said that no catalogue of books and periodicals can be drawn up that will give a full exposition of the rubber industry. Professor Thorp's work bears every evidence of accuracy and of thoroughness, within the limitations above noted, besides which it has been brought thoroughly up to date.

## CAN THE RUBBER TRUST CORNER CRUDE RUBBER?

*Views of a Rubber Handler.*

"**D**O I believe that the world's production of crude rubber can be controlled by a single corporation? No; it is the most preposterous idea ever heard of," said a member of the crude rubber trade, who has been engaged in it for twenty years, who knows it thoroughly, in this country and abroad, and is in a position to speak authoritatively.

"If such a thing were possible, the people who are handling crude rubber would know it better than anybody else, and whenever there was a movement to consolidate the trade they would be the first to get under cover. But I don't know any crude rubber man who is losing sleep these nights on account of not having been asked to join the rubber trust, with its plans for controlling all the supplies and forcing the outsiders out of business. I hear that a gentleman in the trust movement has reached New York with concessions for rubber lands in South America, but I would not invest a dollar in any scheme of the kind that could be devised.

"Suppose the trust people were really to buy up all Bolivia—and it would only be a question of getting enough money together—the government would be powerless to protect them in a monopoly of rubber. The people already on the ground would claim some rights, and others would be sure to come in, without regard to the rights of the trust. Bolivia is a vast country, with a sparse population, limited means of communication, and a weak government. Under such conditions, any company which gained control of the rubber sources there through the expenditure of large sums of money would be worse off than the rubber handlers who went on buying in the old way, investing nothing beyond the amount of current purchases.

"Suppose, too, that control of Bolivia should be gained by the trust; it would be only a beginning, so immense is the rubber district of South America alone. Only 4 per cent. of all the rubber that comes through Pará is grown in Bolivia. The Brazilian rubber belt is 2000 miles long, and beyond that is Peru, with a rubber area that has never been measured. In all that country business methods are wonderfully complicated. There are long established houses in the Pará trade that don't know how they stand to day, and that couldn't liquidate in ten years. They are making advances constantly of merchandise and provisions to operators up the river, against prospective supplies of rubber; they are receiving rubber constantly for which credit is given, but the accounts are never closed. When a partner in such a house wants to retire he sells his interest to another who remains on the ground to look after it; if he can't sell, there is nothing to do but charge the unsettled accounts to 'profit and loss' and go away and leave them. How could a combination be made of such houses? On what basis could they be brought together?

"The leaders in the Pará rubber trade have reached their present position only after long experience, which has enabled them to know the people they have to deal with, and their peculiar trade customs, so that they are able to decide to whom to make advances and whom to refuse, and how to proceed to collect debts in a country where the courts afford no aid. Even with the advantages from long acquaintance with the field not all the concerns in the Amazon rubber trade are making money. I know that a certain house which has long been engaged in rubber up the river would be glad to retire, but they hesitate

to leave what has been tied up in advances to innumerable rubber gatherers. A public company—such as this proposed trust—controlled by a board of non-resident directors, through salaried managers, could never conduct the rubber business successfully, in South America or anywhere else.

"The African rubber supply must not be forgotten. The production there is very large already, and seems to be growing, though it is hard for outsiders to learn anything about conditions in the interior. No one can say when the supply may begin to fail. Just now, however, immense profits are being made in Congo rubber. Shares in one of the Belgian companies having concessions for rubber in the Congo Free State, of 500 francs par value, were sold lately at 10,000 francs, and are said to pay 15 per cent. on this valuation. This sort of thing cannot go on long without attracting a host of new explorers for rubber. If they can't get into the Belgian Congo territory, they have only to cross the river into French Congo, where the same kind of rubber doubtless exists. I don't see how any kind of trust can bring all this business under one management.

"When the trust is formed I shall be ready to take orders from manufacturers for any amount of rubber at the same prices as are charged by the trust. There never will be any trouble about getting rubber so long as there are buyers for it, until rubber trees stop growing. The known rubber countries are too extensive, and the people now engaged in handling rubber have interests too diverse to render consolidation possible. But even if it were possible, there always will be chances for new people to enter the trade."

## MR. FLINT ON CORNERING CRUDE RUBBER.

IN an authorized interview with Mr. Charles R. Flint, published in THE INDIA RUBBER WORLD of October 15, 1892, that gentleman was asked:

"Cannot a combination be effected in Brazil to corner the crude rubber market?"

"Not a successful one," he replied. "Baron de Gondoriz formed a Brazilian company two or three years ago to corner crude rubber. We consolidated the consuming interests and defeated the corner."

"Is the control of the crude market now secured in New York?"

"Yes; the New York Commercial Co. are the principal factor in the crude rubber trade."

## THIS IS AN OLD STORY.

COINCIDENT with the announcement of the plans for a new rubber trust, with plans for the control of crude supplies as well as the manufacture of mechanical goods, it was given out that the "Compagnia Explorada do Amazonas" had been incorporated in Virginia, to purchase rubber lands and concessions, the same to be operated in harmony with the proposed trust. But there is nothing new in this. The incorporation referred to was effected at Norfolk, Va., on March 5, 1897, and THE INDIA RUBBER WORLD of May 10, 1897, reported an unsuccessful attempt to learn from the vice president of the company something about its plans. The charter names as president, Edward T. Perrine, of Hackensack, N. J.; as vice president, Samuel B. Lawrence, of New York, who disclaimed all knowledge of the company's plans; as secretary and treasurer, John B. Summerfield, a New York broker. Its capital is limited to \$10,000,000.

## ADDITIONAL TRADE NOTES.

THE rubber features at the fourth National Exhibition of Cycles, Automobiles and Accessories, at the Madison Square Garden, New York, held January 21-28, were much less important, in proportion to the whole Exhibition, than in some former years. As intimated in previous issues of *THE INDIA RUBBER WORLD*, the rubber men were not fully convinced of the utility to the trade of longer giving their support to these shows. Creditable displays were made, however, by the New Brunswick Rubber Co., the National Cement and Rubber Manufacturing Co., the Empire Rubber Manufacturing Co., the National India Rubber Co., and the B. F. Goodrich Co., the latter including C. J. Bailey & Co.'s tires.

=It is no secret now that the Rubber Goods Manufacturing Co. have purchased the business of the Peerless Rubber Manufacturing Co. The price paid is not yet made public, but unless it was exorbitant it is unquestionably a good purchase for the new Trust. The Peerless for a number of years past, under the able and energetic management of President Charles H. Dale, has the reputation of having been a gold mine, and in spite of our distrust of the Trust principle as applied to mechanical rubber goods, we must commend this as a shrewd purchase.

=Mr. W. Spoerer, a representative of Felten & Guilleaume, wire and cable manufacturers, of Mulheim-on-Rhine, was a recent welcome visitor to the offices of *THE INDIA RUBBER WORLD*.

=Too late to obtain particulars comes the news of a fire at the works of the Crescent Insulated Wire Co. (Trenton, N. J.) This plant adjoins the works of the Crescent Belting and Packing Co., but, as we understand it, the latter property was not injured.

=The Boston office of the United States Rubber Co., has with the first of the year, taken on some important changes. Mr. Charles W. Barnes hereafter devotes all of his attention to the American rubber goods, and Mr. Arthur Reeve, for a long time a prominent factor in the Woonsocket factory management, makes his headquarters at the Boston office, a part of each week being spent at Naugatuck, where he will do the same work for the Wales-Goodyear plant that he did so effectively for the Woonsocket mill, and will also act as first assistant for Selling Agent Chester J. Pike.

=The Byfield Rubber Co. (Bristol, R. I.) have rented a building for the storage of manufactured goods. They are reported to be producing 4500 pairs of rubbers per day, and all reports are to the effect that they are making a favorable impression in the trade.

## ACKNOWLEDGMENTS.

*THE INDIA RUBBER WORLD* has been favored by the Henry A. Gould Co. (New York) with a copy of their annual statistics of the crude rubber movement, including a graphic comparison of prices for Pará rubber during three years past.

Earle Brothers (New York) have resumed the publication of their annual statistics of crude rubber, in which the comparison covers imports for eighteen years and prices since 1869.

Pusinelli, Prilse & Co. (Pará) have sent us a tabular statement of the exports by the various firms in the rubber trade in Pará and Manáos for 1898. Another copy of this statement has reached us with the compliments of Reimers & Meyer.

The first statistical summary to reach us was that issued by Albert T. Morse & Co. (New York) and this has served as the basis of an article reviewing the crude rubber movement for 1898 printed on another page.

## THE RUBBER TRADE IN CHICAGO.

BY OUR RESIDENT CORRESPONDENT.

THE news of unusual activity in the eastern rubber trade has greatly interested western rubber men. The situation naturally suggests comparisons, and several interviews have been secured by the Chicago correspondent of *THE INDIA RUBBER WORLD* on the subject. The general conclusion may be summed up by saying that the west has not been as fortunate as the east. The elements have not been as auspicious as elsewhere.

Mr. A. F. Solbery, the agent in charge of the Chicago branch of the Boston Rubber Shoe Co., was asked what the situation and outlook were, and he said substantially:

"Business was extremely satisfactory up to the middle of December. The early snow storms in the west created an exceptionally heavy demand for the 'warm goods'—arctics, gaiters, etc. The prospects were bright in this region, and every rubber man was kept busy by the jobbers, who very early called upon them for replenishment of stocks. But about December 15 a change came. The special demand due to the first storms had been satisfied, and the future depended entirely—so far as the warm goods were concerned—upon the weather. But it has since been as adverse as possible. Hence business has been quite slack. West of Omaha there has been some demand for heavy goods, but it has not been great enough to affect Chicago."

In regard to the prospects for the spring trade, Mr. Solbery thought that a great deal still depended on the weather. Good business in the lines of light goods is anticipated, as usual, and there is expectation of an improved demand, as compared with previous years, largely as a result of the generally satisfactory business conditions. Still, the weather is the uncertain factor, and it will determine the difference between merely brisk and very active trade.

Mr. C. B. Allen, selling agent of the United States Rubber Co., and other gentlemen were also seen, and they generally agreed with the view just outlined. Here is a fair summary of their expressions:

"No matter what weather we may have hereafter in this region, the demand for heavy goods is practically over. The rule with jobbers is that, before the year turns, cold and snow are the signals for a considerable trade. But after January 1 a hand-to-mouth business is the rule. At first the prospects were excellent in every branch of the trade, but now the only hope of good business is confined to the lighter goods."

"Taken all in all, however, the present year bids fair to rival the very good season of 1897-98. The general situation leaves little to be desired, and the great demand in the early part of the season will afford compensation for the lessened trade of the time intervening between the fall and spring periods."

Outside of the boot and shoe branch the conditions are decidedly more encouraging. Mr. W. D. Allen, of W. D. Allen & Co., speaking for mechanical rubber goods, said that trade conditions were remarkably good. It is easier to sell goods this season, and better prices are obtained. Higher grade goods are selling, because the consumers are more prosperous and are willing to pay for better quality. The demand for garden hose started in earlier than usual, and business has been steady and regular. The year will not eclipse its predecessor, but that is not to be expected, for last year was a splendid one for the mechanical rubber trade. There is every reason for a confident and hopeful view, and "calamity preaching" is not an occupation in which rubber men indulge now, if they ever did.

V. Y.

## ALL GOLF BALLS ARE ALIKE TO HIM.

SOME interesting views on the subject of golf balls are given by Mr. John Reid, late president of the St. Andrew's Golf Club, of New York, in an interview in the *New York Sun*:

"I am inclined to think that too much importance is attached to the size and markings of golf balls by many players. Any golf ball that measures about  $1\frac{1}{4}$  inches in diameter, made by a first-class firm, will satisfy me. The size markings, 27,  $27\frac{1}{2}$ , and so forth, refer to pennyweights in the old balls made

of leather, stuffed with feathers, used before Gutta-percha balls were invented. The size of the leather was about equal to the present 26 ball, I am told. One of the best amateurs I met in Scotland always told me to use a 28 ball, yet the famous Allan Robertson always used a 26 Gutta-percha. My son, John, Jr., who stands high among the amateurs here, prefers a small ball, about 27. I have often seen men almost in tears because a supply of their favorite ball could not be had, but who, after being forced to start out with a new brand, have made the best score of their lives."

## REVIEW OF THE CRUDE RUBBER MARKET.

THE receipts of rubber at Pará continued light during January, owing to the detention of so many steamers upstream, referred to already in these pages. This fact, together with the activity of manufacturers, has led to a further increase in prices in the consuming markets which has not been confined to Pará grades. Centrals and Africans likewise have been well bought up.

The latest quotations in the New York market are:

## PARÁ.

Islands, fine, new.....	99 @100
Islands, fine, old.....	101 @102
Islands, coarse, new.....	70 @71
Islands, coarse, old.....	none here
Upriver, fine, new.....	101 @102
Upriver, fine, old.....	103 @104
Upriver, coarse, new.....	89 @90
Upriver, coarse, old.....	none here
Cauchó (Peruvian) sheet.....	70 @71
Cauchó (Peruvian) strip.....	72 @73
Cauchó (Peruvian) ball.....	84 @85

## CENTRALS.

Esmeralda, sausage.....	77 @77
Guayaquil, strip.....	65 @70
Nicaragua, scrap.....	75 @76
Mangabeira, sheet.....	57 @58

## EAST INDIAN.

Assam.....	84
Borneo.....	40 @54

Late Pará cables quote:

Per Kilo.	Per Kilo.
Islands, fine.....	108@100
Islands, coarse.....	68@400
Exchange 7½ d.	Exchange 7½

The higher prices of rubber scrap which have prevailed for some time past show no tendency to a decline, but rather to avoid a higher level. Hitherto 6 cents has been considered an extreme figure, but 7½ cents has been named within a few days past as having been involved in actual sales.

In addition to the arrivals from Pará referred to below, is shortly to be added the cargo of the *Polycarp*, which left Pará on January 24, with 434 tons of rubber.

## STATISTICS OF PARA RUBBER.

FOLLOWING is a comparison for corresponding periods of three years, the figures denoting tons of 1000 kilograms:

NEW YORK.					
	Fine and Medium.	Totals.	Totals.	Totals.	
Stocks, November 30.....	206	16 = 222	354	344	
Arrivals, December.....	940	398 = 1338	1347	1293	
Aggregating.....	1146	414 = 1560	1701	1637	
Deliveries, December.....	868	394 = 1262	1297	1204	
Stocks, December 31...	278	20 = 298	404	433	

## NEW YORK RUBBER PRICES FOR DECEMBER.

	1898.	1897.	1896.
Upriver fine.....	96 @98	83 @87	82 @85
Upriver coarse.....	85 ½ @88	56 @63	53 @58
Islands fine.....	90 @94	80 @84	79 @83
Island coarse.....	65 @69	49 @52 ½	44 @48
Cametá coarse.....	66 ½ @70	57 @59	51 @53

We have received William Wright & Co.'s (Liverpool) Annual Rubber Report for 1898, through their New York office, No. 176 Broadway.

Emile Grisar has favored us with an annual report on the Caoutchouc market at Antwerp.

Weisse & Co. (Rotterdam) have sent a statement of the India-rubber, Gutta-percha, and Balata movement in their port for the year.

## IMPORTS FROM PARA AT NEW YORK.

January 5.—By the steamer *Hildebrand* from Manáos and Pará:

IMPORTERS.	Fine.	Medium.	Coarse.	Caucho.	Total.
New York Commercial Co.	128,100	17,400	42,100	2,000 =	189,600
Crude Rubber Co. ....	96,300	14,000	29,600	.....	139,900
Reimers & Meyer.....	50,900	13,700	35,200	.....	99,800
Boston Rubber Shoe Co. ....	72,500	3,900	18,000	.....	94,400
William Wright & Co. ....	21,000	1,100	6,700	.....	28,800
Albert T. Morse & Co. ....	.....	.....	34,200	.....	34,200
Otto G. Mayer & Co. ....	10,700	1,600	10,900	.....	23,200
Joseph Banigan .....	15,000	2,200	4,400	.....	21,600
Ed. Reeks & Co. ....	10,000	1,000	2,300	.....	13,300
Lawrence Johnson & Co. ....	.....	.....	11,400	.....	11,400
George G. Cowl.....	1,100	1,700	2,100	.....	4,900
Total.....	405,600	56,600	196,900	2,000 =	661,100

January 18.—By the steamer *Parauense*, from Pará:

	Fine.	Medium.	Coarse.	Caucho.	Total.
New York Commercial Co.	104,200	43,900	75,400	3,000 =	316,500
Crude Rubber Co. ....	168,000	30,800	92,500	18,100 =	309,400
Otto G. Mayer & Co. ....	73,900	15,000	19,000	.....	107,900
Albert T. Morse & Co. ....	.....	.....	11,400	60,100 =	71,500
Boston Rubber Shoe Co. ....	42,800	5,400	23,400	.....	71,600
Reimers & Meyer.....	20,400	2,100	44,000	.....	66,500
Lawrence Johnson & Co. ....	25,400	2,600	11,100	.....	39,100
Joseph Banigan .....	20,800	1,900	11,400	.....	34,100
William Wright & Co. ....	10,000	700	8,300	.....	19,000
Total.....	555,500	102,400	296,500	81,200 =	1,035,600

January 27.—By the steamer *Flamineuse* from Manáos and Pará :

	Fine.	Medium.	Coarse.	Caucho.	Total.
New York Commercial Co.	304,400	49,800	87,500	39,400 =	481,100
Crude Rubber Co. ....	235,400	43,200	72,900	44,200 =	395,700
Reimers & Meyer.....	224,000	44,800	75,500	.....	344,300
Boston Rubber Shoe Co. ....	72,500	7,500	45,800	18,500 =	144,300
Lawrence Johnson & Co. ....	55,300	8,800	35,400	.....	99,500
Otto G. Mayer & Co. ....	25,700	1,400	14,700	.....	41,800
Joseph Banigan .....	10,400	5,300	10,800	.....	35,500
Edward Reeks & Co. ....	10,300	2,900	4,000	.....	17,200
Albert T. Morse & Co. ....	5,400	1,800	7,800	.....	15,000
William Wright & Co. ....	.....	.....	12,800	.....	12,800
K. Mandell & Co. ....	11,300	.....	1,300	.....	12,600
Hagemeyer & Brunn....	6,600	900	2,500	.....	10,000
George G. Cowl.....	3,200	300	500	.....	4,000
Total.....	983,500	166,700	371,500	102,100 =	1,623,800

## PARA RUBBER VIA EUROPE.

	POUNDS.
DEC. 24.—By the <i>Etruria</i> =Liverpool:	
George A. Alden & Co. (Fine). . . . .	29,000
George A. Alden & Co. (Caucho). . . . .	500
Crude Rubber Co. (Fine) . . . . .	29,000
Crude Rubber Co. (Caucho) . . . . .	500
Reimers & Meyer (Fine) . . . . .	6,000
Reimers & Meyer (Coarse) . . . . .	11,000
William Wright & Co. (Coarse) . . . . .	8,200
	84,200

	POUNDS.
DEC. 27.—By the <i>La Normandie</i> =Havre:	
George A. Alden & Co. (Fine) . . . . .	2,800
George A. Alden & Co. (Caucho) . . . . .	17,300
Crude Rubber Co. (Fine) . . . . .	2,700
Crude Rubber Co. (Caucho) . . . . .	17,300
Reimers & Meyer (Fine) . . . . .	8,000
Reimers & Meyer (Coarse) . . . . .	23,000
Albert T. Morse & Co. (Coarse) . . . . .	71,100

	POUNDS.
JAN. 3.—By the <i>Britannic</i> =Liverpool:	
Reimers & Meyer (Fine) . . . . .	22,000
Reimers & Meyer (Coarse) . . . . .	11,000
Reimers & Meyer (Caucho) . . . . .	10,600
Crude Rubber Co. (Caucho) . . . . .	1,100
George A. Alden & Co. (Caucho) . . . . .	1,100
William Wright & Co. (Fine) . . . . .	11,200
	56,400

	POUNDS.
JAN. 3.—By the <i>La Gascogne</i> =Havre:	
Albert T. Morse & Co. (Fine) . . . . .	7,000
A. T. Morse & Co. (Coarse) . . . . .	18,000
Reimers & Meyer (Fine) . . . . .	15,000
	40,000

	POUNDS.
JAN. 4.—By the <i>Auranta</i> =Liverpool:	
George A. Alden & Co. (Fine) . . . . .	28,000
Crude Rubber Co. (Fine) . . . . .	28,000
Reimers & Meyer (Coarse) . . . . .	11,200
	67,200

	POUNDS.
JAN. 5.—By the <i>Majestic</i> =Liverpool:	
William Wright & Co. (Coarse) . . . . .	14,200
Reimers & Meyer (Coarse) . . . . .	8,700
	22,900

	POUNDS.
JAN. 9.—By the <i>Umbria</i> =Liverpool:	
George A. Alden & Co. (Coarse) . . . . .	6,600
George A. Alden & Co. (Caucho) . . . . .	23,600
Crude Rubber Co. (Caucho) . . . . .	23,600
Reimers & Meyer (Fine) . . . . .	7,500
Reimers & Meyer (Coarse) . . . . .	2,000
	62,700

	POUNDS.
JAN. 14.—By the <i>Germanic</i> =Liverpool:	
Reimers & Meyer (Coarse) . . . . .	9,000
	9,000

	POUNDS.
JAN. 16.—By the <i>La Bretagne</i> =Havre:	
Reimers & Meyer (Fine) . . . . .	31,600
Reimers & Meyer (Coarse) . . . . .	3,500
Albert T. Morse & Co. (Caucho) . . . . .	25,000
	59,500

	POUNDS.
JAN. 17.—By the <i>Servia</i> =Liverpool:	
Reimers & Meyer (Fine) . . . . .	22,500
Reimers & Meyer (Coarse) . . . . .	7,500
	30,000

	POUNDS.
JAN. 19.—By the <i>Teutonic</i> =Liverpool:	
Reimers & Meyer (Coarse) . . . . .	9,000
William Wright & Co. (Fine) . . . . .	4,000
	13,000

	POUNDS.
JAN. 21.—By the <i>Campagna</i> =Liverpool:	
Reimers & Meyer (Coarse) . . . . .	11,000
	11,000

	POUNDS.
DEC. 24.—By the <i>Segurana</i> =Mexico:	
Thebaud Brothers . . . . .	700
H. W. Peabody & Co. . . . .	500
F. Probst & Co. . . . .	200
	1,400

	POUNDS.
DEC. 24.—By the <i>Bellenden</i> =Bahia:	
New York Commercial Co. . . . .	2,200
	2,200

	POUNDS.
DEC. 27.—By the <i>Jason</i> =Cape Gracias:	
Eggers & Heinlein . . . . .	4,500
A. S. Lascellas & Co. . . . .	2,000
A. James & Co. . . . .	2,000
Samper & Jimenez . . . . .	1,500
K. Mandell & Co. . . . .	500
Ott G. Mayer & Co. . . . .	300
For London . . . . .	1,000
	11,800

	POUNDS.
DEC. 24.—By the <i>Etruria</i> =Liverpool:	
Reimers & Meyer . . . . .	22,000
	22,000

	POUNDS.
DEC. 27.—By the <i>Adirondack</i> =Cartagena:	
Kunhardt & Co. . . . .	8,000
Flint, Eddy & Co. . . . .	2,892
A. P. Strout . . . . .	2,550
Lanman & Kemp . . . . .	1,717
W. R. Grace & Co. . . . .	706
Pomares & Cushman . . . . .	593
F. Penderford & Co. . . . .	400
For Europe . . . . .	14,653

	POUNDS.
A. M. Capen Sons . . . . .	4,917
Flint, Eddy & Co. . . . .	4,347
Dumarest & Co. . . . .	4,132
Roldan & Van Sickle . . . . .	3,760
H. Marquardt & Co. . . . .	3,497
A. P. Strout . . . . .	2,860
Kunhardt & Co. . . . .	2,724
Frame, Alston & Co. . . . .	2,395
Pomares & Cushman . . . . .	2,200
W. Loaiza & Co. . . . .	1,729
Samuel Brothers . . . . .	1,470
D. A. de Lima & Co. . . . .	1,081
Theodore Herrmann . . . . .	1,107
Eggers & Heinlein . . . . .	945
J. W. Wuppermann . . . . .	677
Klimenthorst & Co. . . . .	598
Jose Agostini . . . . .	211
Piza Nephews & Co. . . . .	532
	77,302
DEC. 27.—By the <i>Britannic</i> =Liverpool:	
Livesey & Co . . . . .	11,500
JAN. 3.—By the <i>El Monte</i> =New Orleans:	
A. T. Morse & Co. . . . .	5,000
JAN. 3.—By the <i>Beneventura</i> =New Orleans:	
A. T. Morse & Co . . . . .	2,800
Gillespie Bros. . . . .	1,600
JAN. 3.—By the <i>Alene</i> =Greytown:	
A. T. Morse & Co . . . . .	2,000
Gillespie Bros. . . . .	1,600
JAN. 3.—By the <i>Aleene</i> =Greytown:	
A. T. Morse & Co . . . . .	2,000
Gillespie Bros. . . . .	1,600
JAN. 3.—By the <i>Aurania</i> =Liverpool:	
Reimers & Meyer . . . . .	8,000
JAN. 5.—By the <i>Knickerbocker</i> =New Orleans:	
A. T. Morse & Co. . . . .	5,000
JAN. 6.—By the <i>Kathay</i> =Mexico:	
H. Marquardt & Co . . . . .	27,300
J. W. Wilson & Co. . . . .	200
JAN. 7.—By the <i>Finance</i> =Colon:	
Flint, Eddy & Co . . . . .	5,794
Crude Rubber Co. . . . .	2,892
J. Aparicio & Co. . . . .	2,550
Lanman & Kemp . . . . .	1,717
W. R. Grace & Co. . . . .	706
Pomares & Cushman . . . . .	593
F. Penderford & Co. . . . .	400
JAN. 14.—By the <i>Orizaba</i> =Mexico:	
H. Marquardt & Co . . . . .	1,300
E. N. Tibbals . . . . .	1,000
Thebaud Brothers . . . . .	1,100
Flint, Eddy & Co . . . . .	1,000
Graham, Hinckley & Co. . . . .	700
F. Penderford & Co. . . . .	200
JAN. 11.—By the <i>Allegany</i> =Cartagena:	
Roldan & Van Sickle . . . . .	3,000
J. Ferro . . . . .	1,100
John Boyd Jr., & Co . . . . .	1,000
Lanman & Kemp . . . . .	1,000
Kunhardt & Co . . . . .	800
Dumarest & Co . . . . .	4,462
W. R. Grace & Co . . . . .	3,900
Roldan & Van Sickle . . . . .	3,937
Munoz & Espriella . . . . .	3,762
Gillespie Bros. . . . . .	2,812
Hirzel, Feltman & Co . . . . .	1,382
J. B. Sagerman . . . . .	1,170
Ed. Sheftelin & Co . . . . .	868
Samper & Jimenez . . . . .	827
J. Aparicio & Co . . . . .	901
R. F. Cornwell . . . . .	610
A. M. Capen Sons . . . . .	120
JAN. 16.—By the <i>Louisiana</i> =New Orleans:	
A. T. Morse & Co . . . . .	40,000
Gillespie Bros. . . . . .	5,000
JAN. 16.—By the <i>Kansas City</i> =Savannah:	
Order . . . . .	5,000
JAN. 16.—By the <i>Allat</i> =Greytown:	
A. P. Strout . . . . .	15,000
Andreas & Co . . . . .	7,500
Kunhardt & Co . . . . .	5,000
Flint, Eddy & Co . . . . .	1,000
G. Amsinck & Co . . . . .	800
Penderford & Co . . . . .	800
For Europe . . . . .	1,200
JAN. 18.—By the <i>Malanzas</i> =Mexico:	
H. Marquardt & Co . . . . .	1,500

	POUNDS.
E. Steiger & Co . . . . .	400
L. N. Chemedin & Co . . . . .	300
H. W. Peabody & Co . . . . .	200
E. N. Tibbals . . . . .	200
JAN. 18.—By the <i>Phoenicia</i> =Hamburg:	
Reimers & Meyer . . . . .	8,500
JAN. 20.—By the <i>Dudley</i> =Cape Gracias:	
Eggers & Heinlein . . . . .	16,000
Samper & Jimenez . . . . .	2,000
JAN. 21.—By the <i>Advance</i> =Colon:	
E. Steiger & Co . . . . .	5,500
Crude Rubber Co . . . . .	5,808
Ellinger Brothers . . . . .	1,998
Flint, Eddy & Co . . . . .	1,945
J. Aparicio & Co . . . . .	770
Piza Nephews & Co . . . . .	239
JAN. 20.—By the <i>El Monte</i> =New Orleans:	
Albert T. Morse & Co . . . . .	5,500
JAN. 21.—By the <i>Campagna</i> =Liverpool:	
Reimers & Meyer . . . . .	11,000
JAN. 21.—By the <i>Pennybanta</i> =Hamburg:	
Reimers & Meyer . . . . .	7,500
JAN. 21.—By the <i>Bulgaria</i> =Hamburg:	
Reimers & Meyer . . . . .	18,000
George A. Alden & Co . . . . .	11,500
JAN. 24.—By the <i>Adirondack</i> =Cartagena:	
Kunhardt & Co . . . . .	4,000
Roldan & Van Sickle . . . . .	3,000
Flint, Eddy & Co . . . . .	2,000
JAN. 24.—By the <i>Itaka</i> =Mexico:	
E. Steiger & Co . . . . .	3,500</

JAN. 17.—By the <i>Servia</i> =Liverpool:	
George A. Alden & Co.	7,500
Crude Rubber Co.	5,600
Reimers & Meyer.	21,000
Livesey & Co.	3,300
	37,400
JAN. 18.—By the <i>Amsterdam</i> =Rotterdam:	
Reimers & Meyer.	7,000
JAN. 19.—By the <i>Teutonic</i> =L'verpool:	
George A. Alden & Co.	11,700
Crude Rubber Co.	8,000
Livesey & Co.	5,000
	19,700
JAN. 20.—By the <i>Aragonda</i> =Antwerp:	
Reimers & Meyer.	20,000
JAN. 21.—By the <i>Campanda</i> =Liverpool:	
Reimers & Meyer.	25,000
George A. Alden & Co.	8,000
Crude Rubber Co.	8,500
Livesey & Co.	17,000
Joseph Cantor.	3,500
	62,000
JAN. 22.—By the <i>Werkendam</i> =Rotterdam:	
Otto G. Mayer & Co.	11,000
JAN. 21.—By the <i>Pennsylvania</i> =Hamburg:	
George A. Alden & Co.	10,000
Reimers & Meyer.	30,000
A. T. Morse & Co.	1,000
	41,000
JAN. 21.—By the <i>Bulgaria</i> =Hamburg:	
George A. Alden & Co.	8,000
Crude Rubber Co.	5,000
	13,000
EAST INDIAN.	
POUNDS.	
DEC. 21.—By the <i>Europe</i> =London:	
J. W. Greene & Co.	11,000
William Wright & Co.	11,000
	22,000
DEC. 27.—By the <i>Manisou</i> =London:	
Fraud Greene.	12,000
DEC. 28.—By the <i>Aller</i> =Genoa:	
George A. Alden & Co. (Pontianak)	41,800
Reimers & Meyer (Pontianak).	44,800
	82,600
JAN. 17.—By the <i>Marquette</i> =London:	
Reimers & Meyer	6,200

JAN. 19.—By the <i>Menominee</i> =London:	
George A. Alden & Co.	13,000
Crude Rubber Co.	13,000
	26,000
JAN. 21.—By the <i>Bulgaria</i> =Hamburg:	
George A. Alden & Co.	7,000
JAN. 23.—By the <i>Glengyle</i> =Singapore:	
George A. Alden & Co. (Pontianak)	356,500
J. W. Greene & Co. (Pontianak)	75,000
J. W. Greene & Co. (Borneo)	19,000
Order Stiven & Co. (Borneo)	12,000
Reimers & Meyer (Borneo)	30,000
	402,500
GUTTA-PERCHA AND BALATA.	
POUNDS.	
JAN. 4.—By the <i>Maasdam</i> =Rotterdam:	
Robert Soltau & Co.	2,200
JAN. 19.—By the <i>Menominee</i> =London:	
Lamb Manufacturing Co.	2,500
JAN. 21.—By the <i>Pennsylvania</i> =Hamburg:	
George A. Alden & Co.	1,500
BALATA.	
POUNDS.	
JAN. 8.—By the <i>Irrawaddy</i> =Trinidad:	
Flint, Eddy & Co.	3,000
JAN. 14.—By the <i>M. R. Cusa</i> =Ciudad Bolívar:	
Thebaud Brothers.	11,000
JAN. 16.—By the <i>Grenada</i> =Trinidad:	
Flint, Eddy & Co.	2,000

<i>Exports:</i>	
India-rubber	31,700
Reclaimed rubber	125,424

## BOSTON ARRIVALS.

POUNDS.

DEC. 3.—By the <i>Bostonian</i> =London:	
Reimers & Meyer—East Indian	19,896
George A. Alden & Co.—Central	1,010
DEC. 7.—By the <i>Sagamore</i> =Liverpool:	
Reimers & Meyer—African	25,011

2,553

DEC. 7.—By the <i>Corinthia</i> =Liverpool:	
George A. Alden & Co.—African	6,000
DEC. 16.—By the <i>Cambroman</i> =Liverpool:	
George A. Alden & Co.—African	22,189
DEC. 20.—By the <i>Catalonia</i> =Liverpool:	
George A. Alden & Co.—African	7,110
DEC. 23.—By the <i>Michigan</i> =Liverpool:	
	946
DEC. 24.—By the <i>Victorian</i> =Liverpool:	
Boston Rubber Shoe Co.—African	22,433
DEC. 27.—By the <i>Otto Mann</i> =Liverpool:	
Livesey & Co.—Africans	3,992
Reimers & Meyer—Caucho	11,151
DEC. 29.—By the <i>Dominion</i> =Liverpool:	
Livesey & Co.—Africans	12,295

Total at Boston for December	\$ 63,522
Total since January	1,469,742

	POUNDS. VALUE.
Total at Boston for December	141,385 \$ 63,522

Total since January	1,469,742 \$ 13,094
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## NEW ORLEANS.

DECEMBER.

	POUNDS. VALUE.
From Nicaragua	80,571 \$ 51,779

## DECEMBER EXPORTS OF INDIA-RUBBER FROM PARA.

[NOTE.—The figures denote weights in Kilograms.]

EXPORTERS.	UNITED STATES.					EUROPE.					TOTAL.
	FINE.	MEDIUM.	COARSE.	CAUCHO.	TOTAL.	FINE.	MEDIUM.	COARSE.	CAUCHO.	TOTAL.	
Adelbert H. Alden	176,433	24,476	66,570	5,641	273,120	85,850	13,260	44,410	—	143,520	416,640
La Rocque da Costa & Co.	87,480	8,950	85,851	6,290	188,571	25,138	6,210	84,617	—	115,965	304,536
Pusinelli, Prusse & Co.	109,033	9,124	61,589	935	180,681	48,450	3,400	8,720	—	60,570	241,251
The Sears Pará Rubber Co.	134,008	12,619	50,550	—	197,177	—	—	—	—	—	197,177
Denis Crohan & Co.	27,503	7,068	9,666	—	44,237	19,380	1,530	30,080	—	50,990	95,227
Rudolf Zietz	10,753	839	6,080	—	17,672	24,359	2,347	17,857	—	44,563	62,235
R. Suarez	—	—	—	—	—	21,387	12,775	4,737	1,396	40,295	40,295
Velhote, Silva & Co.	—	—	—	—	—	15,640	1,020	9,900	—	26,560	26,560
Kanthack & Co.	—	—	—	—	—	6,874	1,143	12,662	—	20,679	20,679
H. A. Astlett	13,493	813	2,895	—	17,200	—	—	—	—	—	17,200
Singlehurst, Brocklehurst & Co.	—	—	—	—	—	9,215	2,279	241	—	11,735	11,735
Pires, Teixeira & Co.	—	—	—	—	—	III	—	196	—	307	307
Direct from Iquitos	—	—	—	—	—	68,448	2,919	41,050	14,277	126,604	126,604
Direct from Manáos	124,140	28,868	45,593	10,971	209,572	261,881	105,623	67,724	38,158	473,386	682,958
Total for November	682,842	92,757	328,794	23,837	1,128,230	586,733	152,506	322,194	53,831	1,115,264	2,243,494

## NEW JERSEY RUBBER COMPANY,

MANUFACTURERS OF ALL KINDS OF

## RECLAIMED \* RUBBER,

Auxiliary Plant for Trimmings, daily Capacity of 20,000 Pounds. Total daily Capacity 45,000 Pounds.

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